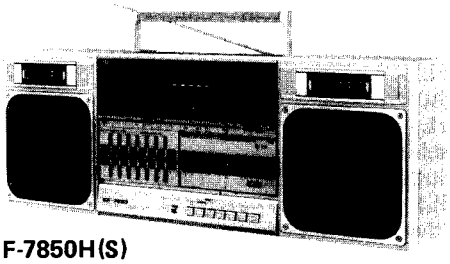
SHARP

SERVICE MANUAL/SERVICE-ANLEITUNG/MANUEL DE SERVICE

S84B0GF7850HD

GF-7850H(D)(S)
GF-7850E(D)



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- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.
- Im Interesse der Benutzer-Sicherheit sollte dieses Gerät wieder auf seinen ursprünglichen Zustand eingestellt und nur die vorgeschriebenen Teile verwendet werden.
- Dans l'intérêt de la sécurité de l'utilisateur, l'appareil devra être reconstitué dans sa condition première et seules des pièces identiques à celles spécifiées, doivent être utilisées.

Note for users in UK
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FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

GENERAL

Power source: (H MODEL)	AC 110 V – 120 V and 220 V – 240 V, 50/60 Hz, DC 12 V (UM/SUM-1 or R20 type x 8)
Power source: (E MODEL)	AC 110 V – 120 V and 220 V – 240 V, 50/60 Hz, DC 12 V (HP-2 or R20 type x 8)
Output power: (DIN 45 324) (H MODEL)	MPO; 20 W (10 W + 10 W) (AC operation) RMS; 10 W (5 W + 5 W) (DC operation)
Output power: (Din 45 324) (H MODEL for Saudi Arabia)	MPO; 30 W (15 W + 15 W) (AC operation) RMS; 10 W (5 W + 5 W) (DC operation) PMPO; 40 W (10 W + 10 W) (AC operation)
Output power: (E MODEL)	MPO; 30 W (15 W + 15 W) (AC operation) RMS; 10 W (5 W + 5 W) (DC operation, 10% distortion)
Semiconductors:	10 ICs 20 Transistors 28 Diodes 10 LEDs
Dimensions:	Width; 630 mm (24-13/16") Height; 225 mm (8-7/8") Depth; 155 mm (6-1/8")
Weight:	5.4 kg (11.9 lbs.) without batteries

TAPE RECORDER

Tape:	Compact cassette tape
Frequency response:	50 Hz – 14,000 Hz (normal tape) 50 Hz – 15,000 Hz (CrO_2 tape) 50 Hz – 16,000 Hz (metal tape)
Signal/noise ratio:	60 dB; Dolby ON 50 dB; Dolby OFF
Wow and flutter: (H MODEL)	0.26% (DIN 45 511)
Wow and flutter: (H MODEL for Saudi Arabia)	0.10% (WRMS) 0.26% (DIN 45 511)
Wow and flutter: (E MODEL)	0.26% (CCIR)
Input sensitivity and impedance:	EXT mic; 1 mV/600 ohms Record/playback socket (AMP); 0.5 mV/8 kohms
Loaded impedance:	
Headphones:	8 ohms – 32 ohms
External speakers;	3 ohms – 8 ohms

RADIO

Frequency range:	LW;	150 kHz – 285 kHz
	MW;	526.5 kHz – 1,606.5 kHz
	SW;	5.95 MHz – 18.0 MHz
	FM;	87.6 MHz – 108 MHz

SPEAKERS

Type:	Open air type
Speakers:	12 cm (4-3/4") woofer x 2 Horn type tweeter x 2
Impedance:	3 ohms
Maximum power handling capacity:	20 W (maximum)

Specifications for this model are subject to change without prior notice.

STRINGING OF DIAL CORD

1. Turn the drum fully in the direction Ⓐ shown in Fig. 2–1 and stretch its cord over the parts in the numerical order.
2. Then turn the tuning control shaft fully in the direction Ⓑ shown in Fig. 2–1 and fix its pointer as shown in Fig. 2–2.

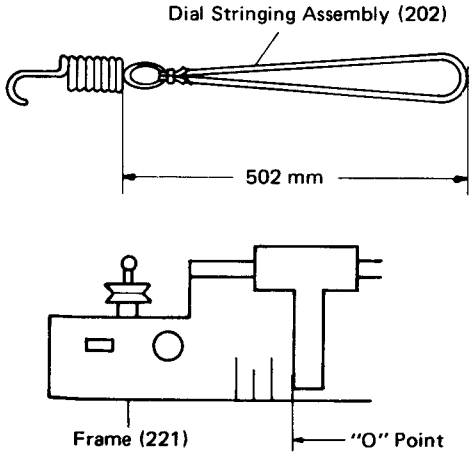

Figure 2–2

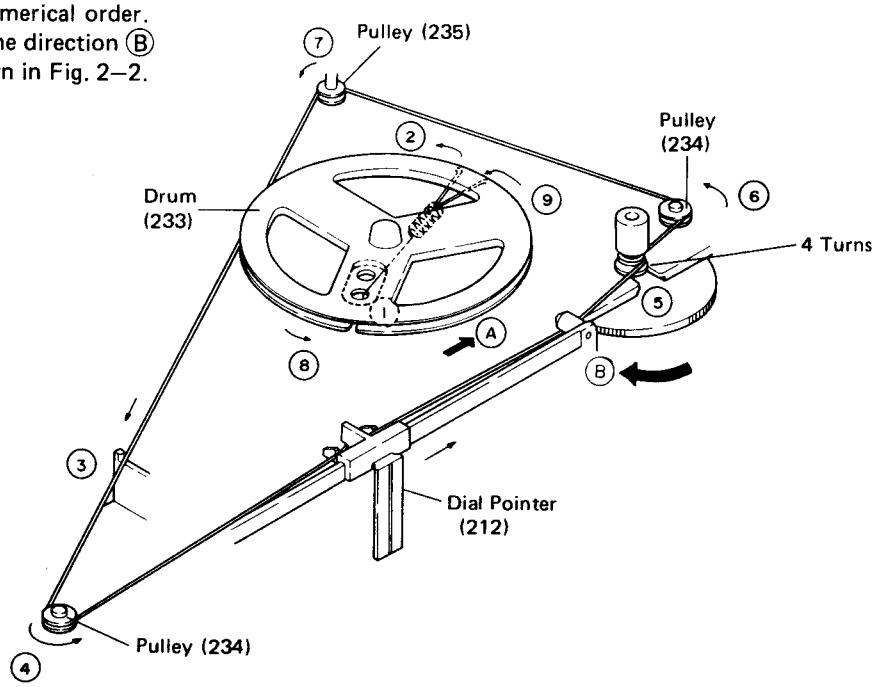

Figure 2–1

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EINE VOLLSTÄNDIGE BESCHREIBUNG DER BEDIENUNG DIESES GERÄTES IST IN DER BEDIENUNGSANLEITUNG ENTHALTEN.

TECHNISCHE DATEN

ALLGEMEINES

Spannungsversorgung:	Wechselspannung 110 V – 120 V und 220 – 240 V, 50/60 Hz Gleichspannung 12 V (8 Batt. Typ UM/SUM-1 oder R20)
Ausgangsleistung: (DIN 45 324)	20 W Musikausgangsleistung (10 W pro Kanal) (Netzspannungsbetrieb) 10 W Sinusleistung (5 W pro Kanal) (Gleichspannungsbetrieb)
Halbleiter:	10 ICs 20 Transistoren 28 Dioden 10 LEDs
Abmessungen:	Breite; 630 mm Höhe; 225 mm Tiefe; 155 mm
Gewicht:	5,4 kg ohne Batterien

CASSETTENRECORDER

Band:	Kompaktcassette
Frequenzgang:	50 Hz – 14 kHz (Normalband) 50 Hz – 15 kHz (CrO_2-Band) 50 Hz – 16 kHz (Reineisenband)
Geräuschspannungsabstand:	60 dB; Dolby eingeschaltet (ON) 50 dB; Dolby ausgeschaltet (OFF)
Gleichlaufschwankungen:	0,26% (DIN 45 511)
Eingangsempfindlichkeit und Impedanz:	Externes Mikrophon; 1 mV/600 Ohm Aufnahme-/Wiedergabeanschluß (AMP); 0,5 mV/8 kOhm
Lastimpedanz:	Kopfhörer; 8 Ohm – 32 Ohm Außenlautsprecher; 3 Ohm – 8 Ohm

RADIO

Frequenzbereiche:	LW; 150 kHz – 285 kHz MW; 526,5 kHz – 1 606,5 kHz KW; 5,95 MHz – 18,0 MHz UKW; 87,6 MHz – 108 MHz

LAUTSPRECHER

Typ:	Freiluft-Typ
Lautsprecher:	2 x 12 cm Tieftöher 2 x Hochtöner in Trichterausführung
Impedanz:	3 Ohm
Maximale Leistung:	20 W (maximal)

Die technischen Daten für dieses Modell können ohne vorherige Ankündigung Änderungen unterworfen sein.

SPNNEN DER SKALENSCHNUR

1. Die Trommel gemäß Abb. 2–1 bis zum Anschlag in Richtung Ⓐ drehen, dann die Schnur in der numerischen Reihenfolge über die einzelnen Teile spannen.
2. Die Abstimmstellerachse gemäß Abb. 2–1 bis zum Anschlag in Richtung Ⓑ drehen, dann den Zeiger gemäß Abb. 2–2 befestigen.

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POUR LA DESCRIPTION COMPLÈTE DU FONCTIONNEMENT DE CET APPAREIL, SE REPORTER AU MODE D'EMPLOI.

CARACTÉRISTIQUES

GENERALITES

Alimentation:	CA 110 V à 120 V et 220 V à 240 V, 50/60 Hz CC 12 V (format UM/SUM-1, ou R20 x 8)
Puissance de sortie: (DIN 45 324)	Musicale; 20 W (10 W + 10 W) (opération CA) Efficace; 10 W (5 W + 5 W) (opération CC)
Semi-conducteurs:	10 CI 20 transistors 28 diodes 10 LED
Dimensions:	Largeur: 630 mm Hauteur; 225 mm Profondeur; 155 mm
Poids:	5,4 kg sans piles

MAGNETOPHONE

Bande:	Bande cassette compacte
Réponse en fréquence:	50 Hz à 14 000 Hz (bande normale) 50 Hz à 15 000 Hz (bande CrO_2) 50 Hz à 16 000 Hz (bande métallique)
Rapport signal/bruit:	60 dB; Dolby en circuit 50 dB; Dolby hors circuit
Pleurage et scintillement:	0,26% (DIN 45 511)
Sensibilité et impédance d'entrée:	Micro externe; 1 mV/600 ohms Douille d'enregistrement/lecture (AMP); 0,5 mV/8 kohms
Impédance de charge:	Casque; 8 ohms à 32 ohms Enceintes enternes; 3 ohms à 8 ohms

RADIO

Gamme de fréquences:	GO; 150 kHz à 285 kHz PO; 526,5 kHz à 1 606,5 kHz OC; 5,95 MHz à 18,0 MHz FM; 87,6 MHz à 108 MHz

ENCEINTES

Type:	Type ouvert
Haut-parleurs:	Woofer de 12 cm x 2 Tweeter type pavillon
Impédance:	3 ohms
Puissance admissible maximale:	20 W (maximum)

Les caractéristiques de ce modèle sont sujettes à modification sans préavis.

PASSAGE DU CORDON DU CADRAN

1. Tourner le tambour entièrement dans le sens Ⓐ montré sur la Fig. 2–1 et passer le cordon sur les organes indiqués et dans l'ordre numérique.
2. Tourner l'arbre de commande d'accord entièrement dans le sens Ⓑ montré sur la Fig. 2–1 et fixer son index comme le montre la Fig. 2–2.

Ⓔ NAME OF PARTS

1. Headphones Jack
2. Built-in Microphone
3. Power Indicator
4. Dolby NR Indicator
5. Side B Playback Indicator
6. Level Meter
7. Side A Playback/Recording Indicator
8. Dolby NR Switch
9. Tape Selector Switches
10. Power/Function Selector Switch
11. FM Mode Switch
12. FM Stereo Indicator
13. Band Selector Switch
14. Tuning Control
15. Digital Tape Counter and Tape Counter Reset Button
16. Cassette Compartment
17. Pause Button
18. Stop/Eject Button
19. Fast Wind Button
20. Play Button
21. Record Button
22. Programme Button
23. Reverse Selector Switch
24. Graphic Equalizer Controls
25. Balance Control
26. Volume Control
27. Speaker Release Knob
28. External Microphone Jack
29. Record/Playback DIN Socket
30. FW/SW Telescopic Rod Antenna
31. External Speaker Terminals
32. Beat Cancel Switch
33. Speaker Cord Holder
34. Battery Compartment
35. AC Power Supply Socket

Ⓓ BEZEICHNUNG DER TEILE

1. Kopfhörerstecker
2. Eingebautes Mikrophon
3. Spannungsversorgungsanzeige
4. Dolby-NR-Anzeige
5. Seite B Wiedergabeanzeige
6. Pegelanzeige
7. Seite A Wiedergabe-/Aufnahmeanzeige
8. Dolby-NR-Schalter
9. Bandsortenwahlschalter
10. Netz-und Funktionswahlschalter
11. UKW-Betriebsartenwahlschalter
12. UKW-Stereoanzeige
13. Wellenbereichswahlschalter
14. Abstimmsteller
15. Digitales Bandzählwerk und Bandzählwerk-Rückstellungstaste
16. Cassettenfach
17. Pausentaste
18. Stopp-/Auswurftaste
19. Bandschnellauftasten
20. Wiedergabetaste
21. Aufnahmetaste
22. Programmtaste
23. Bandumkehrwahlschalter
24. Frequenzgangentzerrersteller
25. Balancesteller
26. Lautstärkesteller
27. Lautsprecher-Entriegelungsknof
28. Außenmikrofonstecker
29. Aufnahme/Wiedergabe-DIN-Buchse
30. UKW/KW-Teleskopstabantenne
31. Außenlautsprecherklemmen
32. Schwebungsunterdrückungsschalter
33. Lautpsrecherkabelhalter
34. Batteriefach
35. Netzanschlußbuchse

Ⓕ NOMENCLATURE

1. Jack de casque
2. Microphone incorporé
3. Témoin d'alimentation
4. Témoin Dolby NR
5. Témoin de lecture de la face B
6. Compteur de niveau
7. Témoin d'enregistrement/lecture de la face A
8. Commutateur Dolby NR
9. Commutateur de sélection de band
10. Commutateur de sélection de fonction/alimentation
11. Commutateur de mode FM
12. Témoin de FM stéréo
13. Commutateur de sélection de gamme d'ondes
14. Commande d'accord
15. Compteur numérique de bande et bouton de remise à zéro du compteur
16. Compartiment de cassette
17. Bouton de pause
18. Bouton d'arrêt/éjection
19. Bouton d'avance rapide
20. Bouton de lecture
21. Bouton d'enregistrement
22. Bouton de programme
23. Commutateur de sélection d'inversion
24. Commandes d'égaliseur graphique
25. Commande de balance
26. Commande de volume
27. Bouton de libération d'enceinte
28. Jack de microphone externe
29. Douille DIN d'enregistrement/lecture
30. Antenne-tige télescopique
31. Bornes d'enceinte externe
32. Commutateur de suppression de battement
33. Support de fil d'enceinte
34. Compartiment de piles
35. Douille d'alimentation de secteur

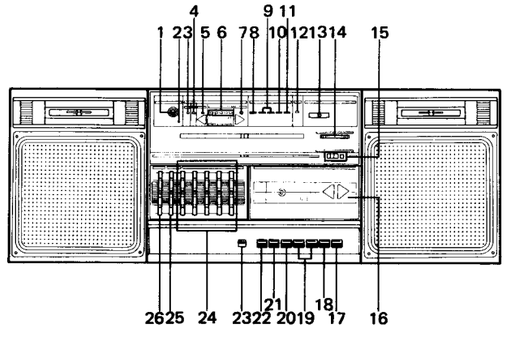

Figure 4–1

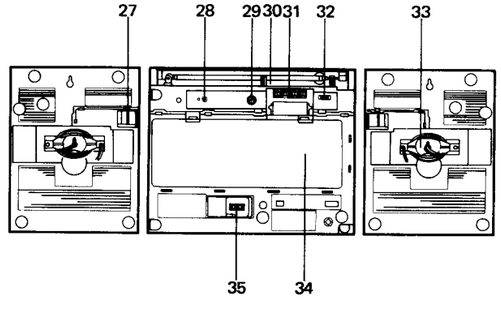

Figure 4–2

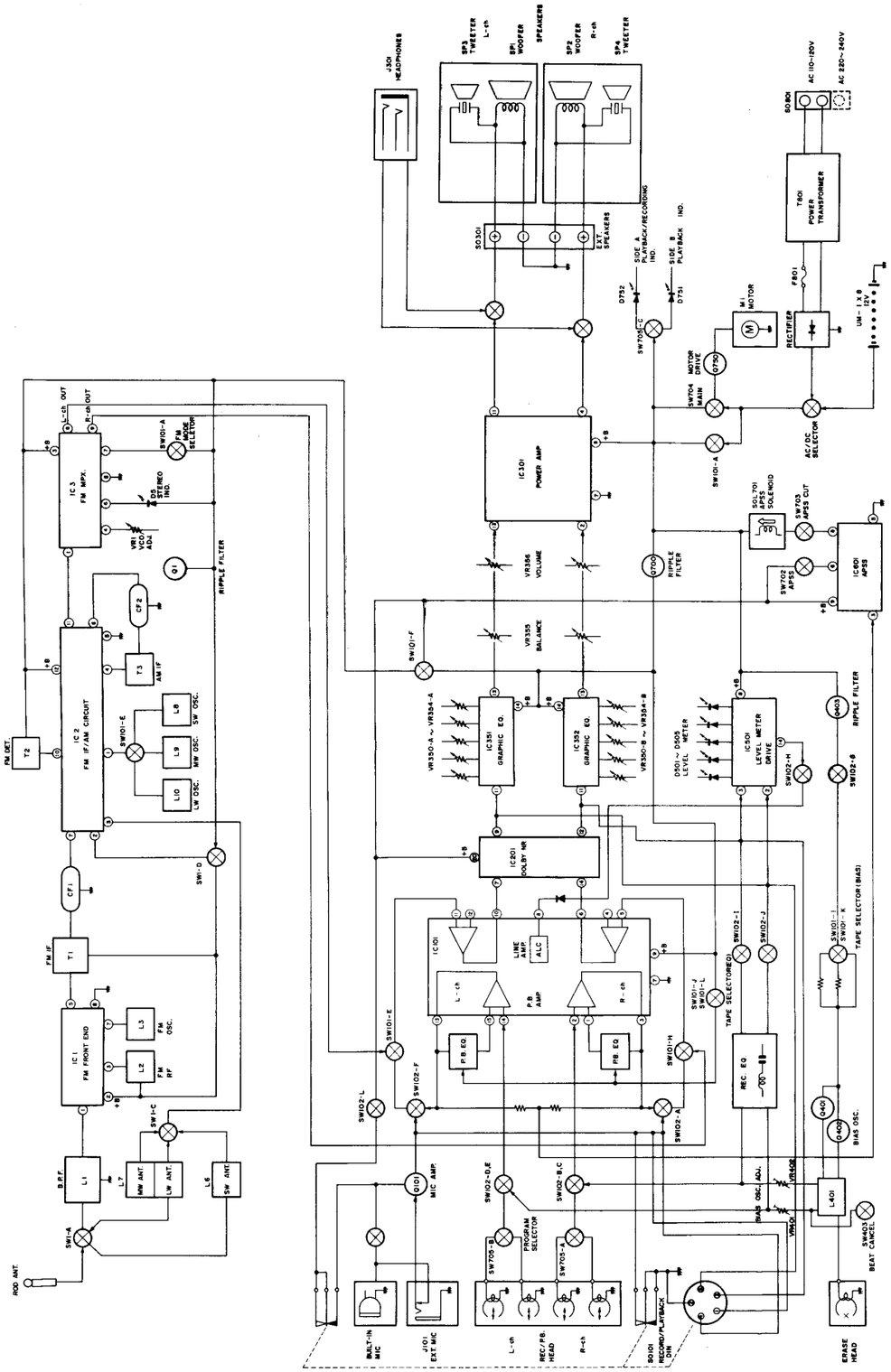

Figure 5 BLOCK DIAGRAM

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DISASSEMBLY

Caution on Disassembly
Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep its safety and excellent performance:

1. Take cassette tape out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit and remove the batteries from the unit.
3. Take off nylon bands or wire holders where they need be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVEL	PROCEDURE	FIGURE
Main body section:			
1	Front cabinet	1. Battery compartment lid . . . . . (A)x1 2. Open the cassette holder . . . . . (B) 3. Screw . . . . . (C)x5	6–1
2	Graphic Equalizer P.W.Board	1. Screw . . . . . (D)x1	6–2
3	Mechanism block	1. Tape counter drive belt . . . . . (E)x1 2. Socket . . . . . (F)x3 3. Screw . . . . . (G)x2	
4	Main P.W.Board (*1) (*2)	1. Record Interlocking Lever . . (H)x1 2. Socket . . . . . (I)x1 3. Screw . . . . . (J)x2 4. Hook . . . . . (K)x2	
5	Power Supply P.W.Board (*1)	1. Screw . . . . . (L)x3	
Speaker section:			
	Front Cabinet	1. Screw . . . . . (M)x5 2. Speaker Cord . . (N)x1	6–3

*1. Each P.W.B. should be removed until the parts to be exchanged can be removed when servicing. If the parts to be exchanged are in the exchangeable condition, the rest of P.W.Bs need not to be removed.
*2. When taking the main P.W.B. out the unit, the P.W.B. cannot be removed unless the every external speaker terminal knobs located at the rear side are let down.

VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows: Slide the AC power supply socket cover by slightly loosing the screw to the visible indication of the side of your local voltage.

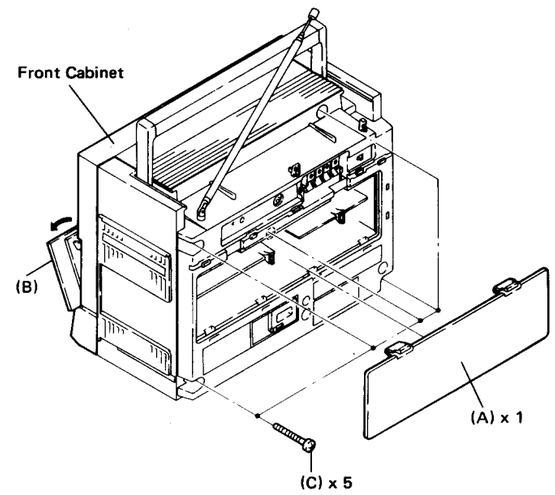

Figure 6–1

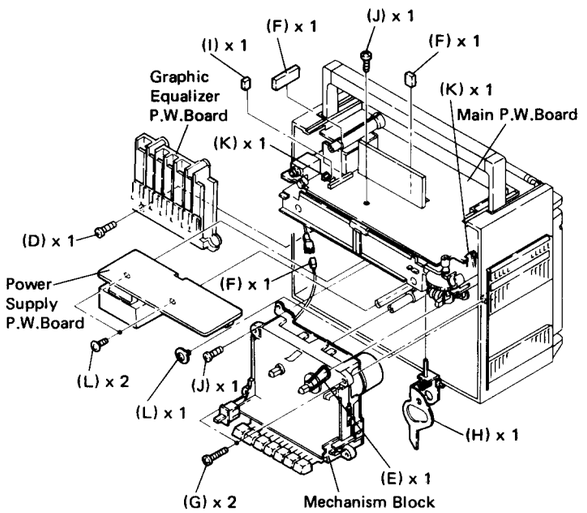

Figure 6–2

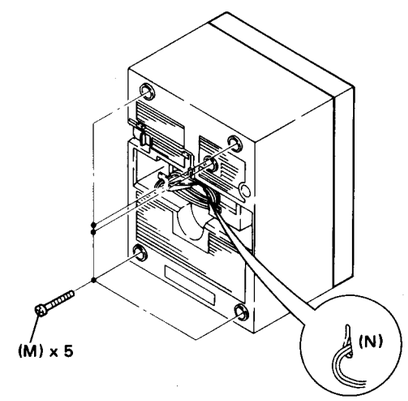

Figure 6–3

Ⓓ ZERLEGEN

Vorsichtsmassregeln Für Das Zerlegen
Beim Zerlegen und Zusammenbauen des Gerätes die folgenden Anweisungen befolgen, um dessen Betriebssicherheit und ausgezeichnete Leistung aufrechtzuerhalten.

1. Die Cassette aus dem Gerät entfernen.
2. Bevor mit dem Zerlegen des Gerätes begonnen wird, unbedingt den Netzkabelstecker aus der Netzsteckdose ziehen und die Batterien aus dem Gerät entfernen.
3. Nylonbänder oder Leitungshalter entfernen, falls dies beim Zerlegen des Gerätes erforderlich ist. Nach Warten des Gerätes darauf achten, die Leitungen wieder so zu verlegen, wie sie vor den Zerlegen angeordnet waren.
4. Beim Ausführen von Wartungsarbeiten auf statische Elektrizität der integrierten Schaltkreise und anderen Schaltungen achten.

SCHRITT	ENTFERNEN	VERFAHREN	ABBILDUNG
Hauptkörper-Teil:			
1	Vordere Gehäusehälfte	1. Batteriefachdeckel . . . . . (A)x1 2. Cassettenhalter öffnen . . . . . (B) 3. Schraube . . . . . (C)x5	6–1
2	Graphischer Frequenzgangentzerrerleiterplatte	1. Schraube . . . . . (D)x1	6–2
3	Laufwerkblock	1. Bandzählwerk-Antriebsriemen . . . (E)x1 2. Buchse . . . . . (F)x3 3. Schraube . . . . . (G)x2	
4	Hauptleiterplatte (*1) (*2)	1. Aufnahmeverriegelungshebel . . (H)x1 2. Buchse . . . . . (I)x1 3. Schraube . . . . . (J)x2 4. Haken . . . . . (K)x2	
5	Spannungsversorgungs-Leiterplatte (*1)	1. Schraube . . . . . (L)x3	
Lautsprecher-Teil:			
	Vordere Gehäusehälfte	1. Schraube . . . . . (M)x5 2. Lautsprecherkabel . . . . . (N)x1	6–3

*1. Die einzelnen Leiterplatten sollten entfernt werden, bis die zu auswechselnden Teile bei der Wartung entfernt werden können. Wenn die zu auswechselnden Teile in auswechselbarem Zustand sind, ist es nicht erforderlich, die restlichen Leiterplatten zu entfernen.
*2. Beim Abnehmen der Hauptleiterplatte von der Einheit kann die Leiterplatte nicht entfernt werden, wenn alle Außenlautsprecherklemmenknöpfe an der Rückseite nicht heruntergelassen werden.

SPANNUNGSWAHL

Vor Betrieb dieses Gerätes üder Netzspannung muß die Spannungsvoreinstellung des Spannungswählers überprüftwerden. Sollte die Einstellung des Spannungswählers nichtmit der örtlichen Netspannung übereinstimmen, diesen auf folgende Weise einstellen. Durch Lösen der Schrauben der Netzzuleitungsbuchsenabdeckung wird die Abdeckung auf die Spannungszahl der örtlichen Netzspannung geschoben.

Ⓕ DÉMONTAGE

Précautions pour le démontage
Lors du démontage de l'appareil et de son remontage, suivre les précautions ci-dessous, pour maintenir la sécurité et d'excellentes performances.

1. Déposer la bande cassette de l'appareil.
2. S'assurer de retirer la fiche d'alimentation secteur de la prise murale avant de démarrer le démontage de l'appareil et déposer les piles de l'appareil.
3. Déposer les bandes de nylon ou les serre-câbles si nécessaire lors du démontage de l'appareil. Après la réparation de l'appareil, s'assurer de redisposer les fils tel qu'ils étaient avant le démontage.
4. Faire attention à l'électricité statique des circuits intégrés et des autres circuits lors de la réparation.

ÉTAPE	DÉPOSE	PROCÉDÉ	FIGURE
Partie du corps principlal:			
1	Coffret avant	1. Abattant du compartiment des piles . . . (A)x1 2. Ouvrir le portecassette . . . . . (B) 3. Vis . . . . . (C)x5	6–1
2	PMI Egalisateur graphyque	1. Vis . . . . . (D)x1	6–2
3	Bloc du mécanisme	1. Courroie d'entraînement du compteur de bande . . . . . (E)x1 2. Douille . . . . . (F)x3 3. Vis . . . . . (G)x2	
4	PMI principale (*1) (*2)	1. Levier d'enclenchement dénregistrement . . . . . (H)x1 2. Douille . . . . . (I)x1 3. Vis . . . . . (J)x2 4. Crochet . . . . . (K)x2	
5	PMI d'alimentation (*1)	1. Vis . . . . . (L)x3	
Partie de l'enceinte:			
	Coffret avant	1. Vis . . . . . (M)x5 2. Fil d'enceinte . . . (N)x1	6–3

*1. Chaque P.M.I. doit être déposée jusqu' à l'échange de pièces de P.M.I. Si l'échange de pièces est possible, on n'a pas besoin de déposer les autres P.M.I.
*2. Il n'est pas possible d'enlever la P.M.I. lors de la dépose de la P.M.I. principale, à moins que l'on n'abaisse tous les boutons de borne pour enceinte externe situés sur le côté arrière.

SÉLECTION DE LA TENSION

Avant de brancher l'appareil sur l'alimentation de secteur, Vérifier la tension préréglée. Si la tension diffère de la tension locale, régler la tension de la facon suivante: faire glisser le couvercle de la douille d'alimentation de secteur, en desserrant un peu la vis, vers l'indication visible du côté de l'alimentation locale.

Ⓔ

MECHANICAL ADJUSTMENT

- For the details of the test tapes used for the measurement, refer to the Table "TEST TAPES FOR MEASUREMENT" on page 22.

ITEM	JIG	ADJUSTMENT POINTS	REMARKS (CHECK)
Pinch roller pressure	Tension gauge (500 g)	Pinch roller pressure spring	Play, Forward: 350 – 420 g Play, Reverse: 300 – 370 g * If the reading is outside the range, replace the pressure spring of the pinch roller.
Driving power	Tape tention measuring cassette Play, Forward TW-2412 Play, Reverse TW-2422	—	(More than 150 g)
Torque	Torque meter Play, Forward TW-2111 Play, Reverse TW-2121 Fast-forward TW-2231 Rewind TW-2231	—	(Play, Forward: 35 – 60 g-cm) (Play, Reverse: 35 – 60 g-cm) (Fast forward: 85 – 125 gcm) (Rewind: 85 – 125 gcm)
Azimuth	Test tape MTT-114	Azimuth adjusting screw *1 ① Reverse ② Forward	Sine waveform attains the maximum.
Tape speed	Test tape MTT-111	Variable resistor on motor	$3{,}000^{+10}_{-30}$ Hz

*1. To perform the azimuth adjustment, adjust the reverse playback screw first and then the forward playback screw.

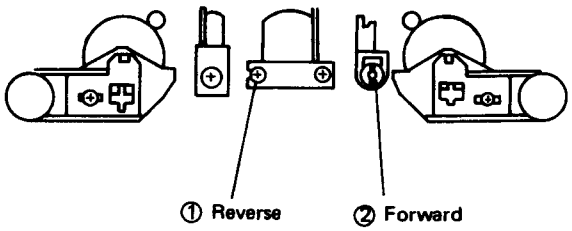

Figure 8–1 PINCH ROLLER PRESSURE AND AZIMUTH POINT

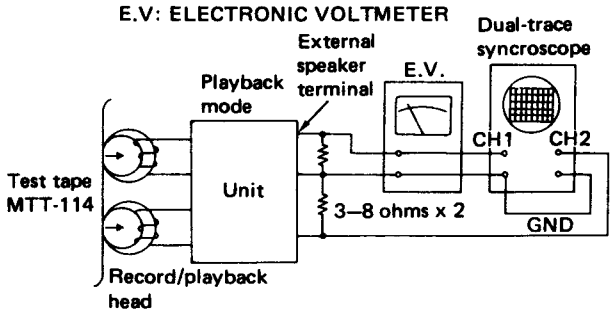

Figure 8–2 AZIMUTH

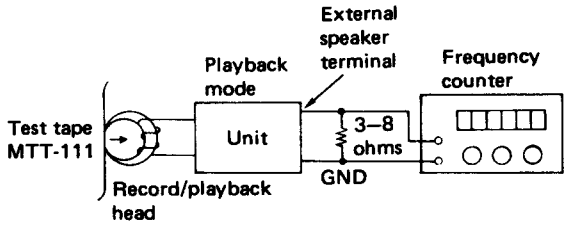

Figure 8–3 TAPE SPEED

Ⓓ MECHANISCHE EINSTELLUNG

- Einzelheiten über die Testbänder für die Messung sind aus der Tabelle "TESTBÄNDER FÜR MESSUNG" auf Seite 23 ersichtlich.

BE-NENNUNG	FÜHRUNG-SLEHRE	EINSTELL-PUNKT	BEMERKUNGEN (PRÜFUNG)
Andruck-rollen-druck	Federwaage (500 g)	Andruckrol-lendruckftder	Wiedergabe, Vorwärts: 350 — 420 g Wiedergabe, Gegenrichtung: 300 — 370 g * Wenn ein anderer Wert angezeigt wird, die Druck-feder der Andruckrolle auswechseln.
Antriebs-kraft	Bandzug-Meßcassette Wiedergabe, Vorwärts: TW-2412 Wiedergabe, Gegenrichtung: TW-2422	—	(Mehr als 150 g)
Dreh-moment	Drehmoment-messer Wiedergabe, Vorwärts: TW-2111 Wiedergabe, Gegenrichtung: TW-2121 Schnellvorlauf: TW-2231 Rückspulung: TW-2231	—	(Wiedergabe, Vorwärts: 35 — 60 g-cm) (Wiedergabe, Gegenrichtung: 35 — 60 g-cm) (Schnellvorlauf: 85 — 125 g-cm) (Rückspulung: 85 — 125 g-cm)
Azimut	Testband MTT-114	Azimuteinstell-schraube *1 ① Gegen-richtung ② Vorwärts	Sinuswellenform wird maximal.
Bandge-schwin-digkeit	Testband MTT-111	Stellwiderstand am Motor	3000^{+10}_{-30} Hz

*1. Um die Azimuteistellung durchzuführen, zuerst die Bandumkehrwiedergabeschraube und dann die Vor-alufwiedergabeschraube einstellen.

Ⓕ RÉGLAGE MÉCANIQUE

- Pour les détails sur les bandes d'essai utilisées pour mesurage, se référer au Tableau "BANDES D'ESSAI POUR MESURAGE" à la page 23.

ARTICLE	GABARIT	POINTS DE RÉGLAGE	REMARQUES (VÉRIFICATION)
Pression du galet pinceur	Jauge de tension (500 g)	Ressort de pression du galet pinceur	Lecture, Avance: 350 — 420 g Lecture, Retour: 300 — 370 g * Si l'indication par la jauge est hors de la gamme, remplacer le ressort de pression du galet pinceur.
Puissance d'entraîne-ment	Cassette de mesure de tension de la bande Lecture, Avance: TW-2412 Lecture, Retour: TW-2422	—	(Plus de 150 g)
Couple	Compteur de couple Lecture, Avance: TW-2111 Lecture, Retour: TW-2121 Avance rapide: TW-2231 Rebobinage: TW-2231	—	(Lecture, Avance: 35 à 60 g-cm) (Lecture, Retour: 35 à 60 g-cm) (Avance rapide: 85 à 125 g-cm) (Rebobinage: 85 à 125 g-cm)
Azimuth	Bande d'essai MTT-114	Vis de réglage de l'azimuth *1 ① Retour ② Avance	Sinusoïdale atteint le maximum.
Vitesse de la bande	Bande d'essai MTT-111	Résistance variable sur le moteur	$3{,}000^{+10}_{-30}$ Hz

*1. Pour effectuer le réglage d'azimut, ajuster d'abord la vis de lecture en retour et puis la vis de lecture d'avance.

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CIRCUIT ADJUSTMENT (AUDIO SECTION)

SETTING POSITION OF SWITCH AND KNOB	• Volume control: Maximum • Balance control: Center • Graphic equalizer control: Center • Power/function selector switch: ⏻ /Tape • Tape selector switch: Normal • Beat cancel switch: A		
ITEM	**INPUT**	**ADJUSTMENT POINT**	**REMARKS (CHECK)**
BIAS OSCILLATION FREQUENCY	——	L401	A: 85 kHz ± 4 kHz (B: 88 kHz ± 4 kHz) (C: 80 kHz ± 4 kHz)
BIAS CURRENT	——	L: VR401 R: VR402	Metal: 90 – 100 mV (Normal: 47 – 53 mV) (CrO_2: 61 – 69 mV)
ERASE CURRENT	——	——	(Metal: 70 – 130 mV) (Normal: 20 – 80 mV) (CrO_2: 40 – 100 mV)
PLAYBACK SENSITIVITY	Test tape MTT-150	L: VR101 R: VR102	Normal: 580 mV
RECORD/ PLAYBACK SENSITIVITY	Non-recorded tape (MTT-502) 315 Hz, –20 dB (1V = 0 dB)	L: VR251 R: VR252	Playback the normal tape recorded and adjust the semi-variable resistor so that the output voltage is the same in record and playback modes.

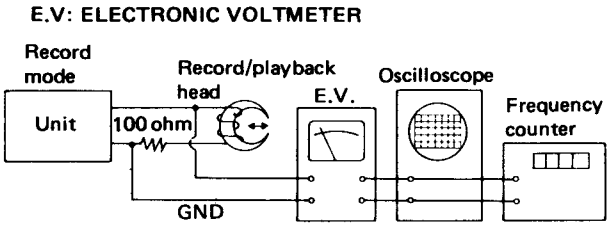


Figure 10–1 BIAS OSCILLATION FREQUENCY/BIAS CURRENT

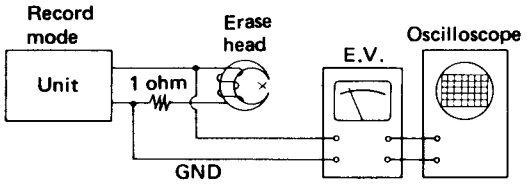


Figure 10–2 ERASE CURRENT

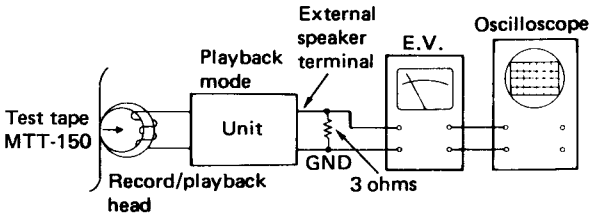


Figure 10–3 PLAYBACK AMPLIFIER SENSITIVITY

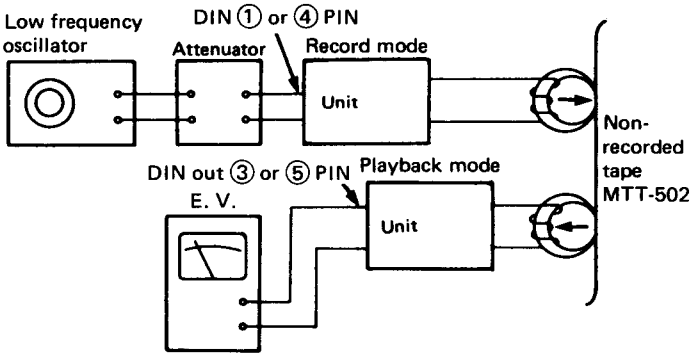
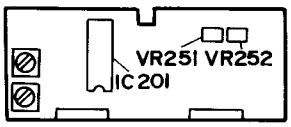


Figure 10–4 RECORD/PLAYBACK SENSITIVITY



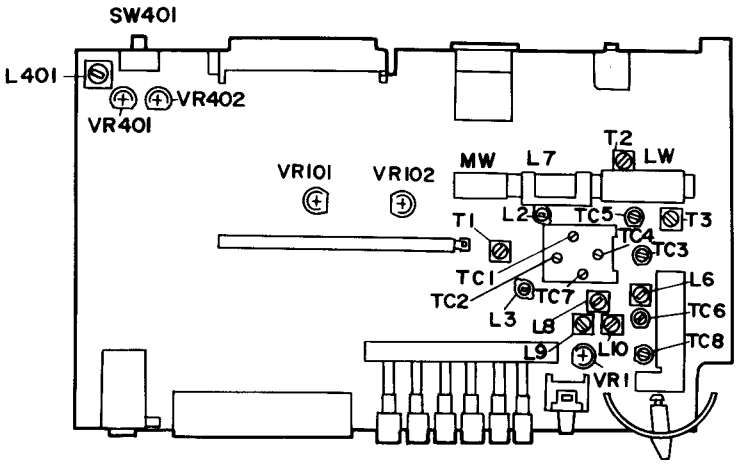


Figure 10–5 ADJUSTMENT POINT

Ⓓ SCHALTUNGSEINSTELLUNG (TONTEIL)

SCHALTER- UND STELLER-EINSTELL-POSITION	• Lautstärkesteller: Maximal • Balancesteller: Mittig • Frequenzgangentzerrersteller: Mittig • Netz-und funktionswahlschalter: ⏻ /Tape (Band) • Bandsortenwahlschalter: Normal • Schwebungsunterdrückungsschalter: A		
BENENNUNG	**EIN-GANG**	**EIN-STELL-PUNKT**	**BEMERKUNGEN (PRÜFUNG)**
VORMAGNET-ISIERUNGS SCHWING-FREQUENZ	——	L401	A: 85 kHz ± 4 kHz (B: 88 kHz ± 4 kHz) (C: 80 kHz ± 4 kHz)
VORMAGNET-ISIERUNGS STROM	——	L: VR401 R: VR402	Reineisendband: 90 – 100 mV (Normalband: 47 – 53 mV) (CrO_2 - Band: 61 – 69 mV)
LÖSCHSTROM	——	——	(Reineisenband: 70 – 130 mV) (Normalband: 20 – 80 mV) (CrO_2 - BAND: 40 mV – 100 mV)
WIEDERGABE-VERSTÄRKER-EMPFIND-LICHKEIT	Testband MTT-150	L: VR101 R: VR102	Normalband: 580 mV
AUFNAHME-/ WIEDERGABE-EMPFINDLICH-KEIT	Unbespiel-tes Band MTT-502 315 Hz, –20 dB (1 V = 0 dB)	L: VR251 R: VR252	Das bespielte Normal-band wiedergeben und den Trimmer so ein-stellen, daß die Ausgangsspannung in der Aufnahme- und Wiedergabe-Betriebsart gleich ist.

Ⓕ RÉGLAGE DU CIRCUIT (SECTION DU AUDIO)

RÉGLAGE DE LA POSITION DES COMMUTA-TEURS ET DES BOUTONS	• Commande de volume: Maximum • Commande d'équilibrage: Centre • Commands d'égaliseur graphique: Centre • Commutateur de sélection de fonction/ alimentation: ⏻ /Band • Commutateur de sélection de bande: Normal • Commutateur de suppression de battement: A		
ARTICLE	**ENTRÉE**	**POINT DE RÈGLAGE**	**REMARQUES (VÉRIFICATION)**
FRÉQUENCE DE L'OSCILLATION DE POLARISATION	——	L401	A: 85 kHz ± 4 kHz (B: 88 kHz ± 4 kHz) (C: 80 kHz ± 4 kHz)
COURANT DE POLARISATION	——	G: VR401 D: VR402	Metal: 90 – 100 mV (Normal : 47 – 53 mV) (CrO_2: 61 – 69 mV)
COURANT D'EFFACEMENT	——	——	(Metal: 70 – 130 mV) (Normal: 20 – 80 mV) (CrO_2: 40 – 100 mV)
SENSIBILITÉ DE L'AMPLIFI-CATEUR DE LECTURE	Bande d'essai MTT-150	G: VR101 D: VR102	Normal: 580 mV
SENSIBILITÉ D'ENREGISTRE-MENT/LECTURE	Bande non enregistrée MTT-502 315 Hz, –20 dB (1 V = 0 dB)	G: VR251 D: VR252	Lire la bande normale enregistrée et régler la résistance semi-variable de telle sorte que la tension de sortie soit la même dans le mode d'enregistrement et dans le mode de lecture.

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CIRCUIT ADJUSTMENT (TUNER SECTION)

AM IF/RF

SIGNAL GENERATOR		400 Hz, 30%, AM modulated			
STEP	TEST STAGE	FRE-QUENCY	DIAL POINTER SETTING	AD-JUST-MENT	REMARKS
MW IF					
1	IF	455 kHz For UK: 468 kHz	High frequency	T3	Adjust for best "IF" curve.
LW RF					
2	Band coverage	145 kHz	Lowest frequency	L10	Adjust for maximal output.
3		295 kHz	Highest frequency	TC8	
4	Tracking	170 kHz	170 kHz	L7	
5		220 kHz	220 kHz	TC5	
6	Repeat steps 2,3,4 and 5 until no further improvement can be made.				
MW RF					
7	Band coverage	510 kHz	Lowest frequency	L9	Adjust for maximal output.
8		1650 kHz	Highest frequency	TC7	
9	Tracking	600 kHz	600 kHz	L7	
10		1,400 kHz	1,400 kHz	TC4	
11	Repeat steps 7,8,9 and 10 until no further improvement can be made.				
SW RF					
12	Band coverage	5.85 MHz	Lowest frequency	L8	Adjust for maximal output.
13		18.5 MHz	Highest frequency	TC6	
14	Tracking	6.5 MHz	6.5 MHz	L6	
15		16 MHz	16 MHz	TC3	
16	Repeat steps 12,13,14 and 15 until no further improvement can be made.				

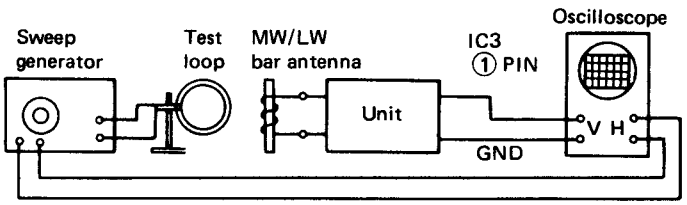

Figure 12–1 AM IF

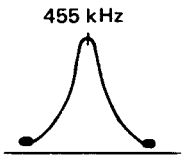

Figure 12–2 AM IF CURVE

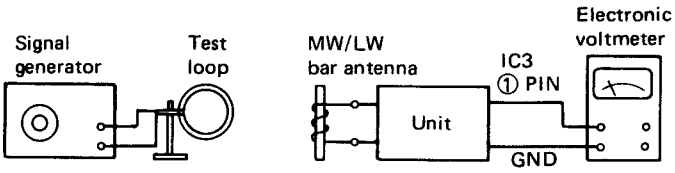

Figure 12–3 MW RF

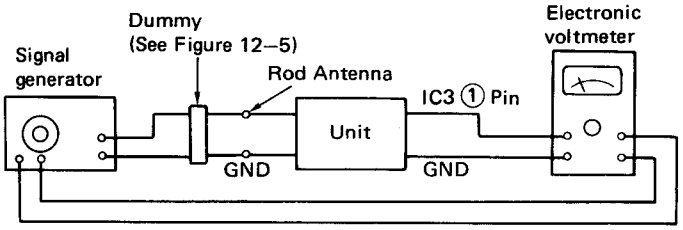

Figure 12–4 SW RF

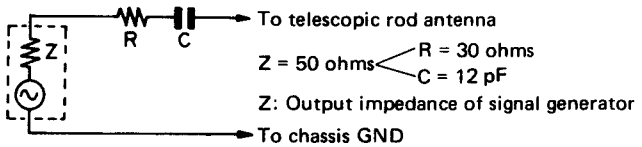

Figure 12–5 SW DUMMY

Ⓓ SCHALTUNGSEINSTELLUNG (TUNERTEIL)

AM-ZF/HF EINSTELLUNG

SIGNAL-GENERATOR		400 Hz, 30%, AM-Modulation			
SCHRITT	PRÜFSTUFE	FREQUENZ	SKALENZEIGEREINSTELLUNG	EINSTELLUNG	BEMERKUNGEN
MW ZF					
1	ZF	455 kHz	Hochfrequenz	T3	Auf beste ZF-Kurve einstellen.
LW HF					
2	Frequenzbereich	145 kHz	Unterste Frequenz	L10	Auf maximalen Ausgang einstellen.
3		295 kHz	Höchste Frequenz	TC8	
4	Gleichlauf	170 kHz	170 kHz	L7	
5		220 kHz	220 kHz	TC5	
6	Die Schritte 2, 3, 4 und 5 wiederholen, bis keine weitere Verbesserung möglich ist.				
MW HF					
7	Frequenzbereich	510 kHz	Unterste Frequenz	L9	Auf maximalen Ausgang einstellen.
8		1 650 kHz	Höchste Frequenz	TC7	
9	Gleichlauf	600 kHz	600 kHz	L7	
10		1 400 kHz	1 400 kHz	TC4	
11	Die Schritte 7, 8, 9 und 10 wiederholen, bis keine weitere Verbesserung möglich ist.				
KW HF					
12	Frequenzbereich	5,85 MHz	Unterste Frequenz	L8	Auf maximalen Ausgang einstellen.
13		18,5 MHz	Höchste Frequenz	TC6	
14	Gleichlauf	6,5 MHz	6,5 MHz	L6	
15		16 MHz	16 MHz	TC3	
16	Die Schritte 12, 13, 14 und 15 wiederholen, bis keine weitere Verbesserung möglich ist.				

Ⓕ RÉGLAGE DU CIRCUIT (SECTION DU TUNER)

RÉGLAGE DE FI/RF AM

GÉNÉRATEUR DE SIGNAUX		400 Hz, 30% , modulé AM			
ÉTAPE	ÉTAGE D'ESSAI	FRÉQUENCE	MISE AU POINT DE L'INDEX	RÉGLAGE	REMARQUES
FI PO					
1	FI	455 kHz	Haute fréquence	T3	Régler sur la meilleure courbe "FI".
RF GO					
2	Étendue de gamme d'ondes	145 kHz	Fréquence la plus basse	L10	Régler sur la sortie maximale.
3		295 kHz	Fréquence la plus élevée	TC8	
4	Alignement	170 kHz	170 kHz	L7	
5		220 kHz	220 kHz	TC5	
6	Refaire les étapes 2, 3, 4 et 5 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				
RF PO					
7	Étendur de gamme d'ondes	510 kHz	Fréquence la plus basse	L9	Régler sur la sortie maximale.
8		1 650 kHz	Fréquence la plus élevée	TC7	
9	Alignement	600 kHz	600 kHz	L7	
10		1 400 kHz	1400 kHz	TC4	
11	Refaire les étapes 7, 8, 9 et 10 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				
RF OC					
12	Étendue de gamme d'ondes	5,85 MHz	Fréquence la plus basse	L8	Régler sur la sortie maximale.
13		18,5 MHz	Fréquence la plus élevée	TC6	
14	Alignement	6,5 MHz	6,5 MHz	L6	
15		16 MHz	16 MHz	TC3	
16	Refaire les étapes 12, 13, 14 et 15 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				

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FM IF/RF ADJUSTMENT

SWITCH POSITION		FM mono			
SIGNAL GENERATOR		400Hz, 30%, FM modulated			
STEP	TEST STAGE	FRE-QUENCY	DIAL POINTER SETTING	AD-JUST-MENT	REMARKS
1	IF	10.7 MHz	High frequency	T1	1. Using a minus driver, turn the core of T2 counter-clockwise before taking it out of the bobbin. 2. Adjust for best "IF" curve.
2	Detec-tion			T2	Adjust for best "S" curve.
3	Repeat steps 1 and 2 until no further improvement can be made.				
4	Band coverage	87.3 MHz	Lowest frequency	L3	Adjust for maximal output.
5		108.3 MHz	Highest frequency	TC2	
6	Tracking	88 MHz	88 MHz	L2	
7		108 MHz	108 MHz	TC1	
8	Repeat steps 4, 5 and 6, 7 until no further improvement can be made.				

VCO FREQUENCY ADJUSTMENT

SIGNAL GENERATOR	400 Hz, 30%, FM modulated (mono signal)		
FREQUENCY	DIAL POINTER SETTING	ADJUST-MENT	REMARKS
FM mono position		FM stereo position (unmodulated)	
98 MHz at 60 dB	98 MHz	VR1	Adjust for 38.00 kHz ± 100 Hz.

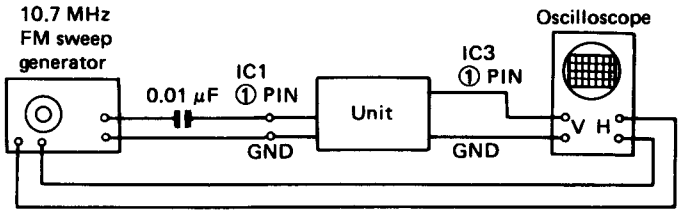


Figure 14–1 FM IF

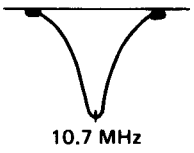


Figure 14–2 IF CURVE

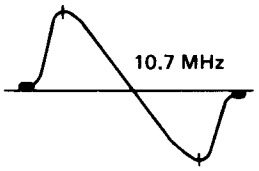


Figure 14–3 S CURVE

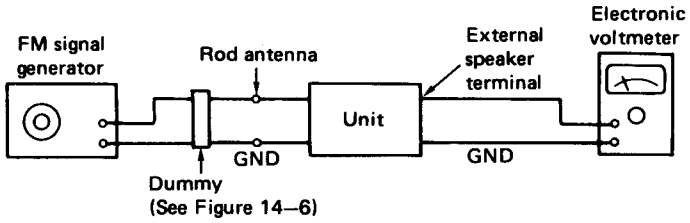


Figure 14–4 FM RF

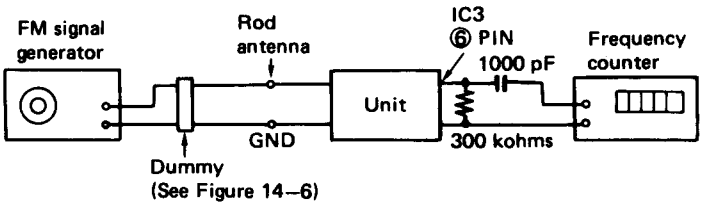


Figure 14–5 VCO FREQUENCY

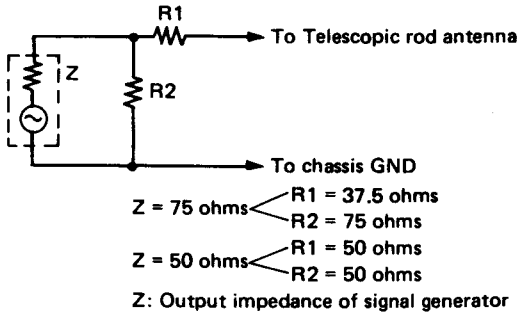


Figure 14–6 FM DUMMY

Ⓓ

UKW-ZF/HF-EINSTELLUNG

SCHALTER-STELLUNG		FM mono			
SIGNAL-GENERATOR		400 Hz, 30%, UKW-Modulation			
SCH-RITT	PRÜF-STUFE	FRE-QUENZ	SKALEN-ZEIGEREIN-STELLUNG	EIN-STEL-LUNG	BEMER-KUNGEN
1	ZF	10,7 MHz	Hoch-frequenz	T1	1. Den Kern von T2 mit Hilfe eines normalen Schrauben-ziehers ent-gegen dem Uhrzeigersinn drehen, bevor dieser aus der Spule ge-nommen wird. 2. Auf beste ZF-Kurve einstellen.
2	Detek-tion			T2	Auf beste S-Kurve einstellen
3	Die Schritte 1 und 2 wiederholen, bis keine weitere Verbesserung möglich ist.				
4	Fre-quenz-bereich	87,3 MHz	Unterste Frequenz	L3	Auf maximalen Ausgang einstellen.
5		108,3 MHz	Höchste Frequenz	TC2	
6	Gleich-lauf	88 MHz	88 MHz	L2	
7		108 MHz	108 MHz	TC1	
8	Die Schritte 4, 5, 6 und 7 wiederholen, bis keine weitere Verbesserung möglich ist.				

EINSTELLUNG DER VCO-FREQUENZ

SIGNAL-GENERATOR	400 Hz, 30%, UKW-Modulation (Mono-Signal)		
FREQUENZ	SKALEN-ZEIGEREIN-STELLUNG	EIN-STELLUNG	BEMERKUNGEN
"FM mono" einstellen		"FM stero" einstellen (unmoduliert)	
98 MHz bei 60 dB	98 MHz	VR1	Auf 38,00 kHz ± 100 Hz einstellen.

DIE ANWEISUNG DER FREQUENZEINSTELLUNG

Um der Postverfügung Nr. 478/1981 zu entsprechen, wird der UKW-Frequenzbereich mit Hilfe der Oszillatorspule (L3-untere Eckfrequenz: 87,5 MHz) und des Oszillator-trimmers (TC2-obere Eckfrequenz: 108,0 MHz) eingestellt.

Ⓕ

RÉGLAGE DE FI/RF FM

POSITION DU COMMUTATEUR		FM mono			
GÉNÉRATEUR DE SIGNAUX		400 Hz, 30% , modulé FM			
ÉTAPE	ÉTAGE D'ESSAI	FRÉ-QUENCE	MISE AU POINT DE L'INDEX	RÉ GLAGE	REMARQUES
1	FI	10,7 MHz	Haute fréquence	T1	1. À l'aide d'un tournevis plat, tourner le noyau de T2 à gauche avant de le sortir de la bobine. 2. Régler sur la meilleure courbe "FI".
2	Détec-tion			T2	Régler sur la meilleure courbe "S".
3	Refaire les étapes 1 et 2 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				
4	Étendur de gamme d'ondes	87,3 MHz	Fréquence la plus basse	L3	Régler sur la sortie maximale.
5		108,3 MHz	Fréquence la plus élevée	TC2	
6	Aligne-ment	88 MHz	88 MHz	L2	
7		108 MHz	108 MHz	TC1	
8	Refaire les étapes 4, 5 et 6, 7 jusqu'à ce qu'une amélioration ultérieure ne puisse plus être obtenue.				

RÉGLAGE DE LA FRÉQUENCE VCO

GÉNÉRATEUR DE SIGNAUX	400 Hz, 30% , modulé FM (mono signal)		
FRÉQUENCE	MISE AU POINT DE L'INDEX	RÈGLAGE	REMARQUES
Position FM mono		Position FM stéréo (non modulés)	
98 MHz à 60 dB	98 MHz	VR1	Réglage sur 38,00 kHz ± 100 Hz.

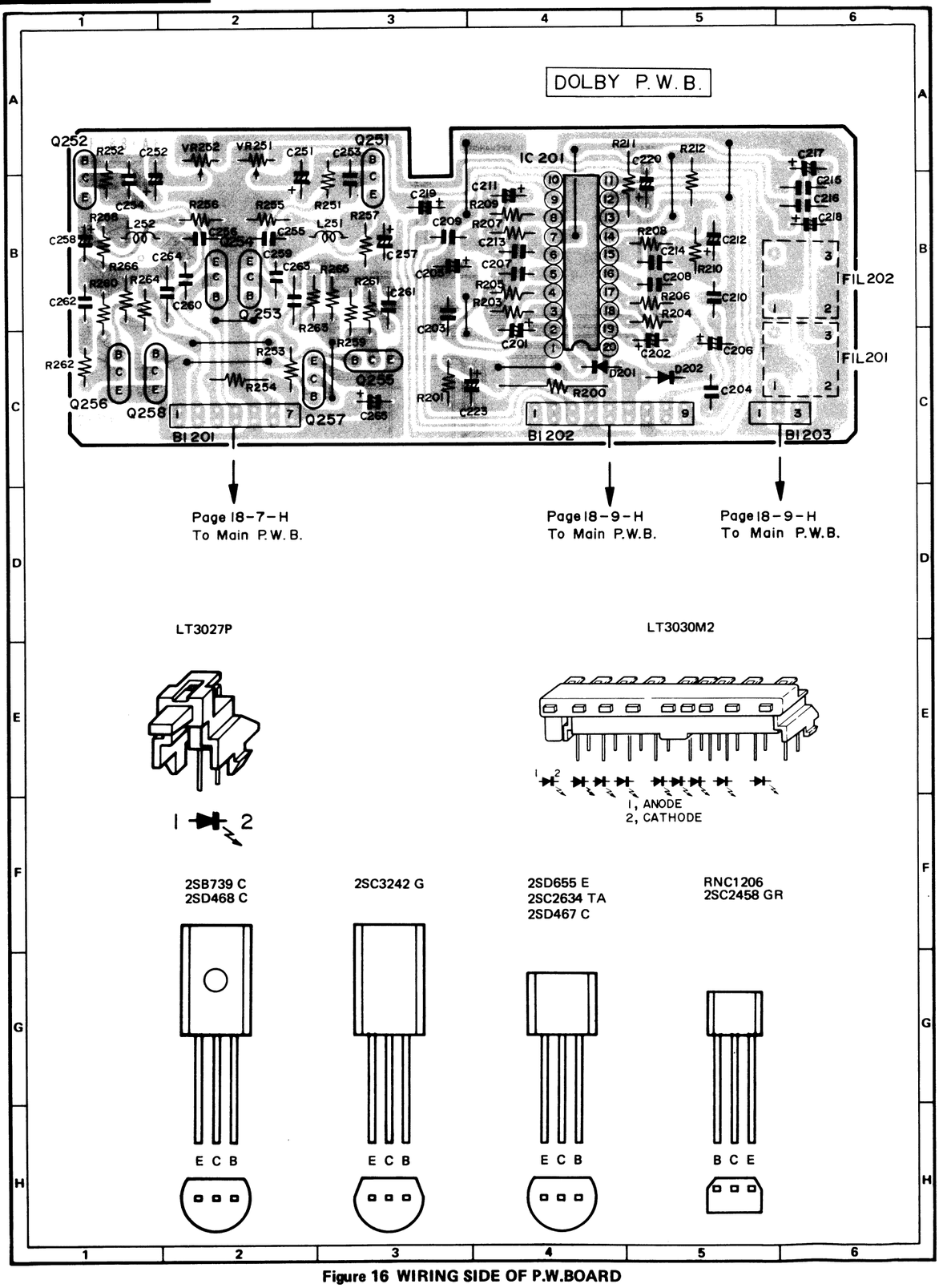


Figure 16 WIRING SIDE OF P.W.BOARD

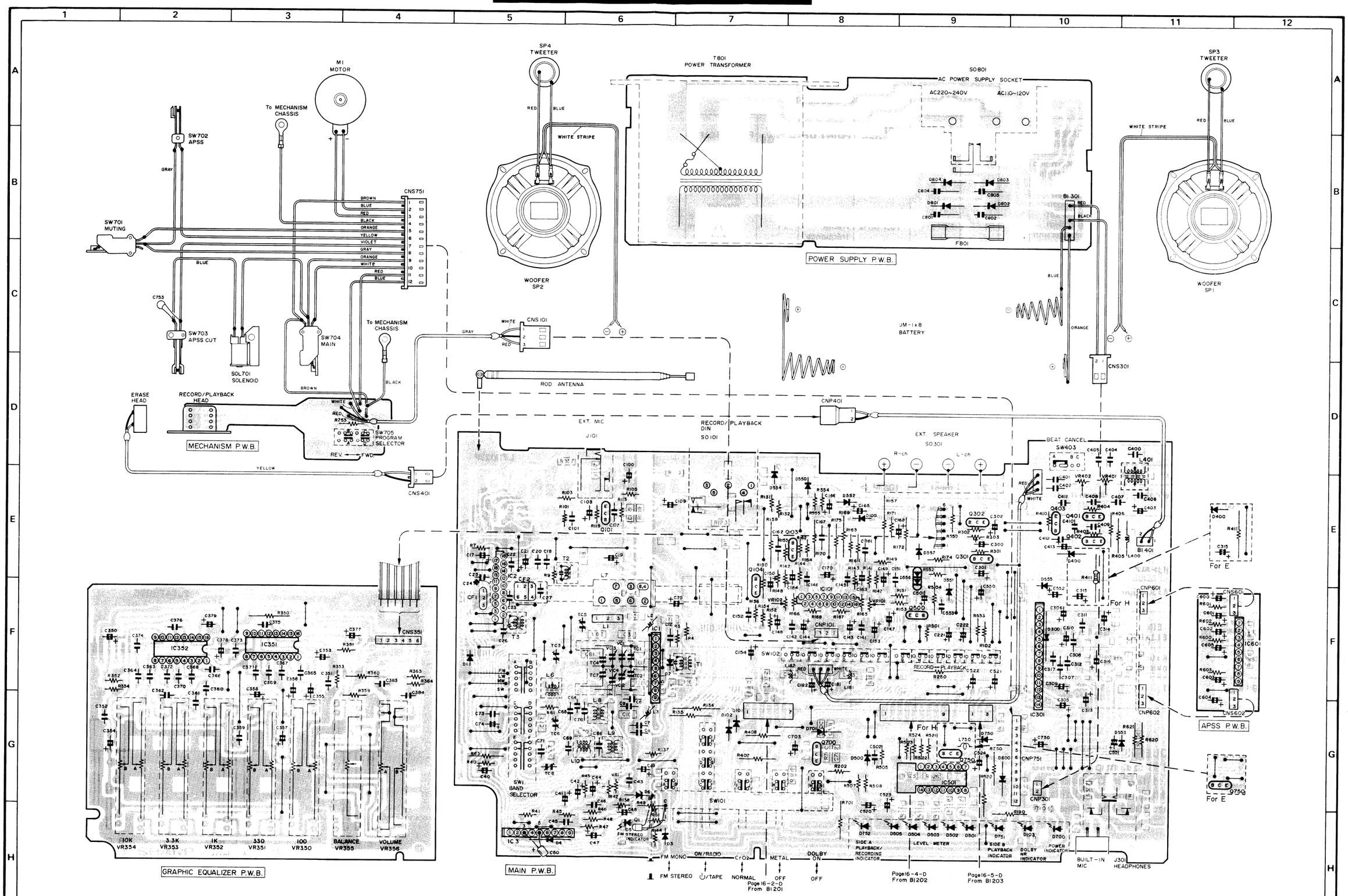
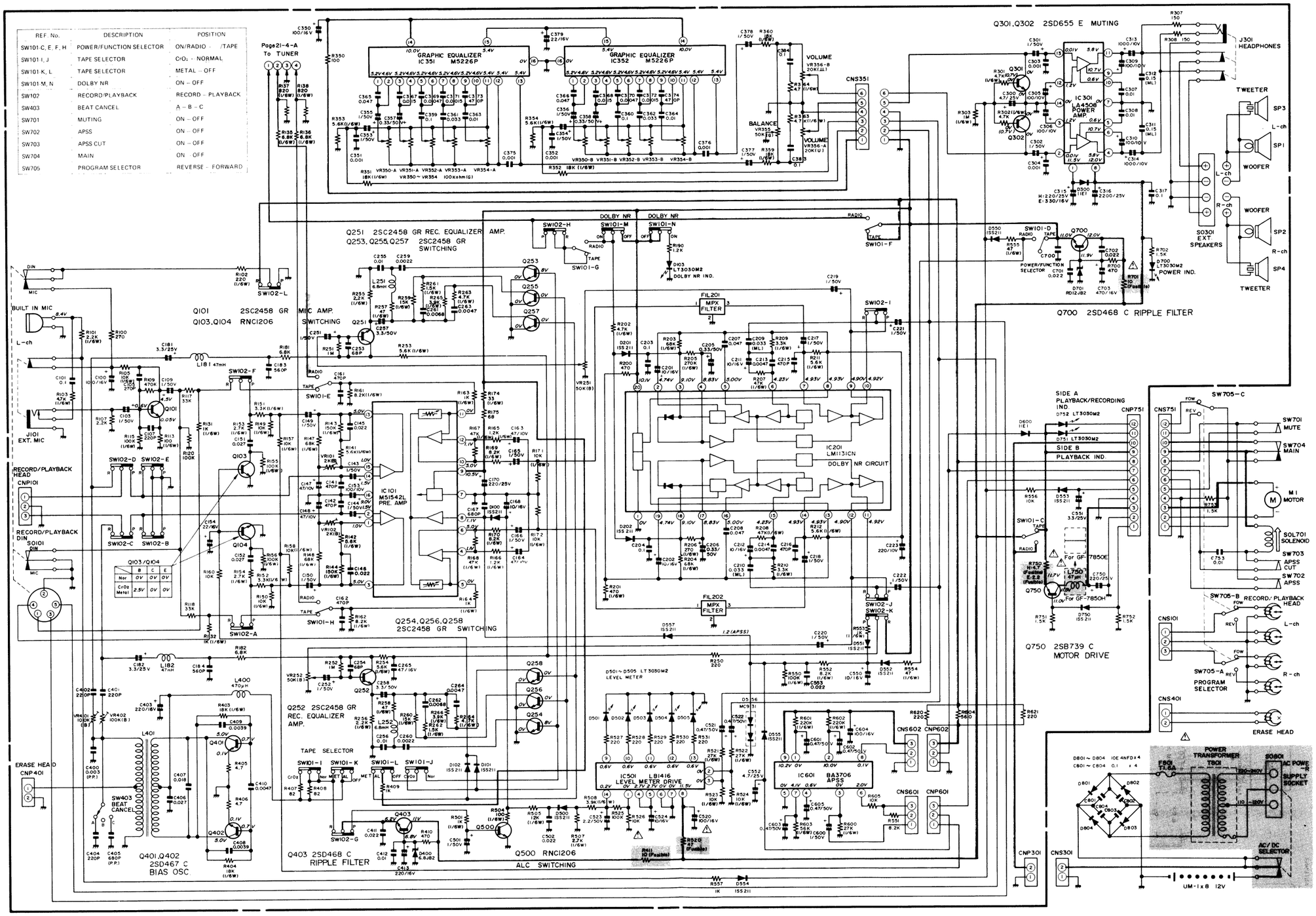


Figure 17 WIRING SIDE OF P.W.BOARD

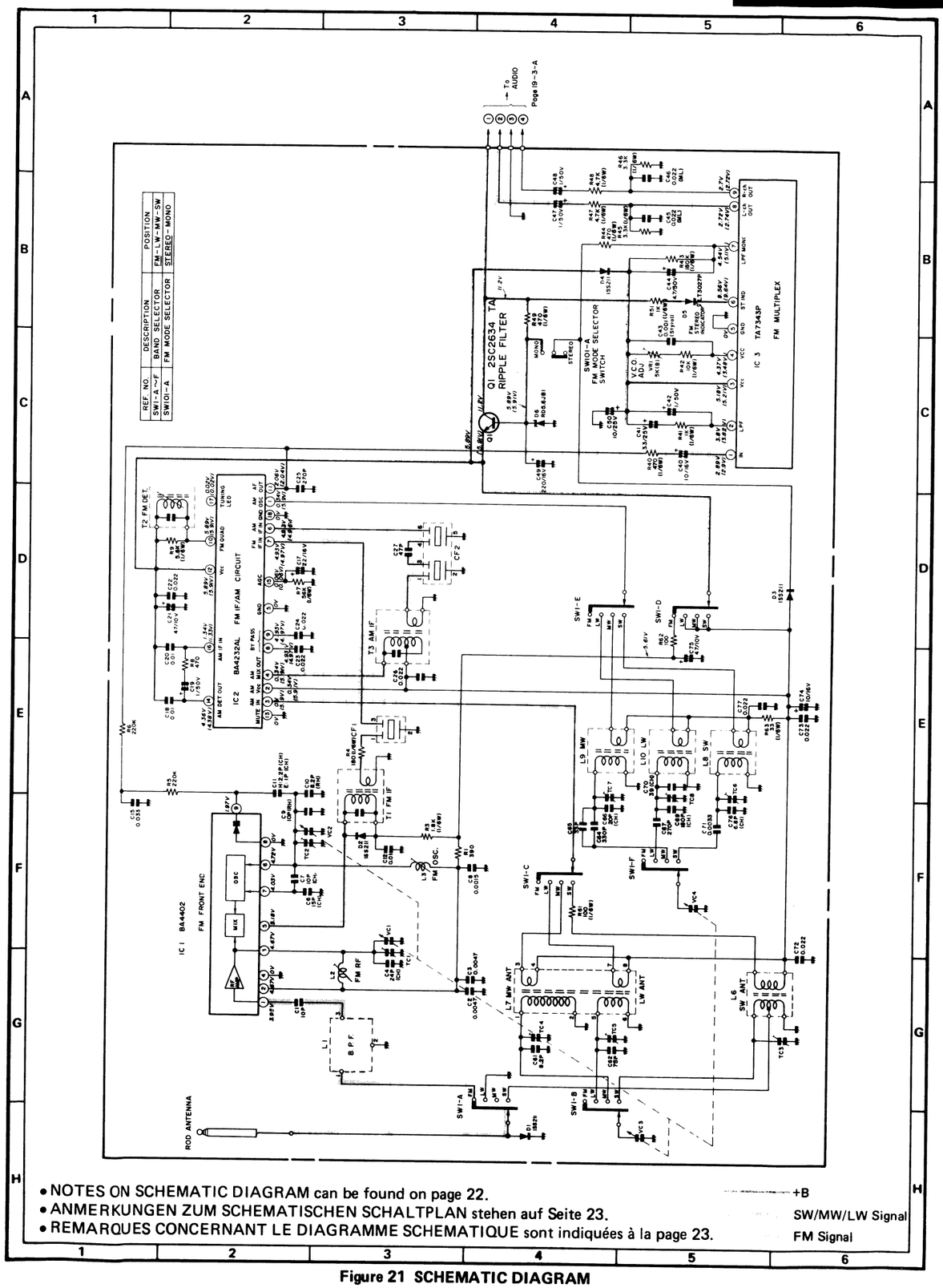
REF. No.	DESCRIPTION	POSITION
SW101-C, E, F, H	POWER/FUNCTION SELECTOR	ON/RADIO – /TAPE
SW101-I, J	TAPE SELECTOR	CrO_2 – NORMAL
SW101-K, L	TAPE SELECTOR	METAL – OFF
SW101-M, N	DOLBY NR	ON – OFF
SW102	RECORD/PLAYBACK	RECORD – PLAYBACK
SW403	BEAT CANCEL	A – B – C
SW701	MUTING	ON – OFF
SW702	APSS	ON – OFF
SW703	APSS CUT	ON – OFF
SW704	MAIN	ON – OFF
SW705	PROGRAM SELECTOR	REVERSE – FORWARD



- NOTES ON SCHEMATIC DIAGRAM can be found on page 22.
- ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN stehen auf Seite 23.
- REMARQUES CONCERNANT LE DIAGRAMME SCHEMATIQUE sont indiquées à la page 23.

FM Signal
+B
Tape Signal
Record Signal
APSS Signal
Mic Signal
DIN Input Signal

Figure 19 SCHEMATIC DIAGRAM



- NOTES ON SCHEMATIC DIAGRAM can be found on page 22.
- ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN stehen auf Seite 23.
- REMARQUES CONCERNANT LE DIAGRAMME SCHEMATIQUE sont indiquées à la page 23.

Figure 21 SCHEMATIC DIAGRAM

NOTES ON SCHEMATIC DIAGRAM

Ⓔ

- Resistor:
  To differentiate the units of resistors, such symbol as K is used: the symbol K means 1000 ohm and the resistor without any symbol is ohm-type resistor.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  ( ): AM mode
  Marking except for ( ): FM mode
- Parts marked with "⚠" (▨) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

TEST TAPES FOR MEASUREMENT

COMPACT CASSETTE TYPE			
TITLE	MODEL	FREQUENCY/ LEVEL	APPLICATION
FLUTTER	MTT-111	3 kHz, –10 dB	Tape speed, Wow and flutter check
AZIMUTH	MTT-113 MTT-113C MTT-114	6.3 kHz, –10 dB 8 kHz, –10 dB 10 kHz, –10 dB	Head azimuth adjustment
DISTORTION	MTT-118	1 kHz, –10 dB	Distortion check level adjustment
DOLBY LEVEL CALIBRATION	MTT-150	Dolby B-Type Tone 200 nwb/m	Dolby NR B-type level adjustment
BLANK	MTT-502	——	Record frequency check

TORQUE METER FOR COMPACT CASSETTE		
MODEL	MEASUREMENT RANGE	APPLICATION
TW-2111	10 – 100 g-cm	Normal : Playback torque
	1.5 – 10 g-cm	Normal : Back tension
TW-2121	10 – 100 g-cm	Reverse : Playback torque
	1.5 – 10 g-cm	Reverse : Back tension
TW-2231	30 – 200 g-cm	Fast-forward, Rewind torque
TW-2412	0 – 300 g	Normal : Driving power
TW-2422	0 – 300 g	Reverse : Driving power

Ⓓ ANMERKUNGEN ZUM SCHEMATISCHEN SCHALTPLAN

- Widerstände:
  Um die Einheiten der Widerstände unter-scheiden zu können, werden Symbole wie K benutzt. Das Symbol K bedeutet 1000 Ohm Bei Widerständen ohne Symbol handelt es sich um ohmsche Widerstände.
- Kondensatoren:
  Zum Bezeichnen der Kondensatoreinheit wird das Symbol P benutzt; dieses Symbol P bedeutet Nanofard. Die Einheit eines Kondensators ohne Symbol ist Mikrofarad. Für Elektrolytkondensatoren wird die Be-zeichnung "Kapazität / Stehspannung" benutzt.
- Die in den einzelnen Teilen angegebenen Spannungen werden mit einem Digitalvielfachmeßgerät zwischen dem betreffen den Teil und dem Chassis ohne Signalzuleitung gemessen.
  ( ): AM-Betriebsart
  Anzeichnen, außer ( ): UKW-Betriebsart
- Die mit ⚠ (▓) bezeichneten Teile sind besonders wichtig für die Aufrechterhaltung der Sicherheit. Beim Wechseln dieser Teile sollten die vorgeschriebenen Teile immer verwendet werden, um sowohl die Sicherherheit als auch die Leistung des Gerätes aufrechtzuerhalten.
- Änderungen des schematischen Schaltplans und der Verdrahtungsseite der Leiterplatte für dieses Modell im Sinne von Verbesserungen jederzeit vorbehalten.

TESTBÄNDER FÜR MESSUNG

KOMPAKTCASSETTENTYP			
BENENNUNG	**MODELL**	**FREQUENZ/ PEGEL**	**ANWENDUNG**
GLEICHLAUF-SCHWANK-UNGEN	MTT-111	3 kHz, –10 dB	Überprüfung der Bandgesch-windigkeit und Gleichlauf-schwankungen
AZIMUT	MTT-113 MTT-113C MTT-114	6,3 kHz, –10 dB 8 kHz, –10 dB 10 kHz,–10 dB	Kopfazimutein-stellung
KLIRR-FAKTOR	MTT-118	1 kHz, –10 dB	Verzerrungs-pegeleinstellung
DOLBY-PEGEL-EICHUNG	MTT-150	Ton von Dolby B-Typ 200 nwb/m	Dolby-NR B-Typ-Pegelein-stellung
LEER-CASSETTE	MTT-502	——	Überprüfung der Aufnahme-frequenz

DREHMOMENTMESSER FÜR KOMPAKTCASSETTE		
MODELL	**MESSBEREICH**	**ANWENDUNG**
TW-2111	10 – 100 g-cm	Normal : Wiedergabedrehmoment
	1,5 – 10 g-cm	Normal : Rückzug
TW-2121	10 – 100 g-cm	Rücklauf : Wiedergabedrehmoment
	1,5 – 10 g-cm	Rücklauf : Rückzug
TW-2231	30 – 200 g-cm	Schnellvorlauf-, Rückspul-drehmoment
TW-2412	0 – 300 g	Normal : Antriebskraft
TW-2422	0 – 300 g	Rücklauf : Antriebskraft

Ⓕ REMARQUES CONCERNANT LE DIAGRAMME SCHÉMATIQUE

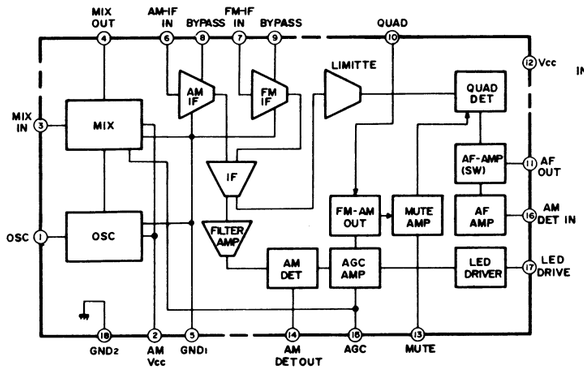
- Résistance:
  Pour différencier les unités de résistances, on utilise des symbole tels que K: le symbole K signifie 1000 ohms et la résistance donnée sans symbole est une résistance de type ohm.
- Condensateur:
  Pour indiquer l'unité de condensateur, on utilise le symbole P; ce symbole P signifie micro-microfarad, et l'unité de condensateur donnée sans ce symbole est le microfarad. En ce qui concerne le condensateur électrolytique, on utilise l'expression "tension de régime/capacité"
- La tension indiquée dans chaque section est celle mesurée par un multimètre numérique entre la section en question et le châssis, en l'absence de tout signal.
  ( ): Mode AM
  Marque, à l'exception de ( ): Mode FM
- Les pièces portant la marque ⚠ (▓) sont particulière-ment importantes pour le maintien de la sécurité. S'assurer de les remplacer par des pièces du numéro de pièce spécifié pour maintenir la sécurité et la performance de l'appareil.
- Le diagramme schématique et le côté câblage de la PMI de ce modèle sont sujets à modifications sans préavis pour l'amélioration de ce produit.

BANDES D'ESSAI POUR MESURAGE

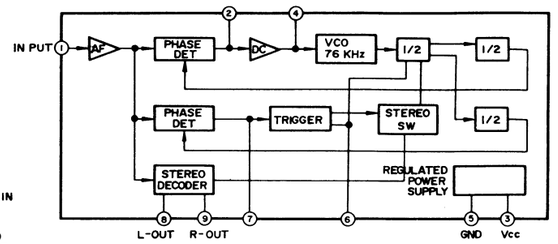
TYPE CASSETTE COMPACTE			
TITRE	**MODÈLE**	**FRÉQUENCE/ NIVEAU**	**APPLICATION**
PLEURAGE	MTT-111	3 kHz, –10 dB	Vérification de la vitesse de bande et du pleurage et scintillement
AZIMUTH	MTT-113 MTT-113C MTT-114	6,3 kHz, –10 dB 8 kHz, –10 dB 10 kHz, –10 dB	Réglage de l'azimuth de la tête
DISTORSION	MTT-118	1 kHz, –10 dB	Réglage de niveau de distorsion
CALIBRAGE DU NIVEAU DOLBY	MTT-150	Tonalité Dolby type B, 200 nwb/m	Réglage du niveau type B Dolby NR
ESPACE VIERGE	MTT-502	——	Vérification de la fréquence d'enregistrement

JAUGE DE COUPLE POUR CASSETTE COMPACTE		
MODÈLE	**GAMME DE MESURE**	**APPLICATION**
TW-2111	10 – 100 g-cm	Normal : Lecture d'enroulement
	1,5 – 10 g-cm	Normal : Tension arrière
TW-2121	10 – 100 g-cm	Retour : Lecture d'enroulement
	1,5 – 10 g-cm	Retour : Tension arrière
TW-2231	30 – 200 g-cm	Couple d'avance rapide et de rebobinage
TW-2412	0 – 300 g	Normal : Puissance d'entraînement
TW-2422	0 – 300 g	Retour : Puissance d'entraînement

BA4232



TA7343P



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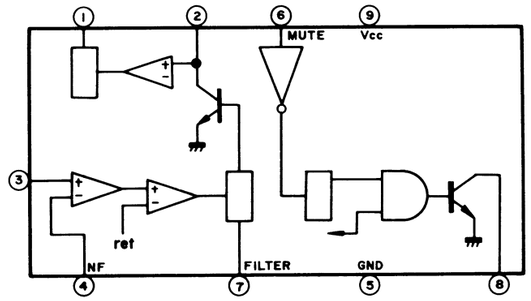
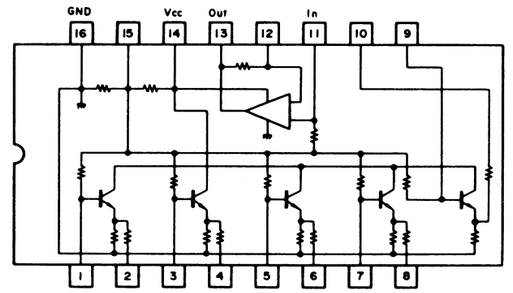


M5226P



LB1416

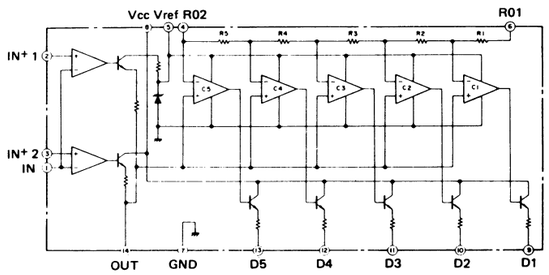
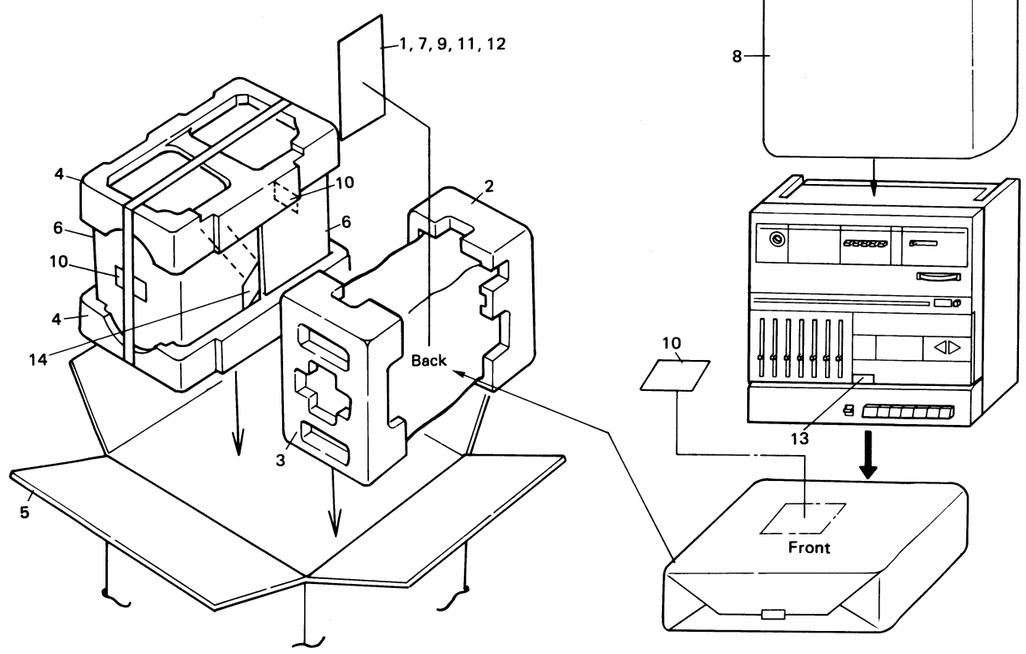


Figure 24 EQUIVALENT CIRCUIT (BLOCK DIAGRAM) OF IC

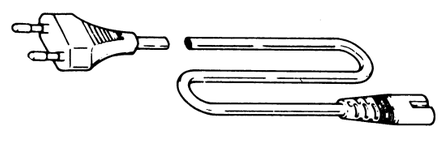
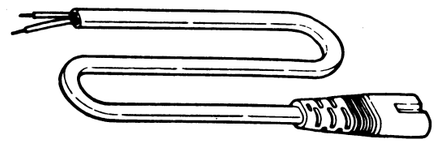
PACKING METHOD (FOR UK)

SETTING POSITIONS OF SWITCHES AND KNOB	
Band Selector Switch	MW
Dolby NR Switch	OFF
Tape Selector Switches	OFF/ NORMAL
FM MODE Switch	STEREO
Power Function Selector Switch	⏻/TAPE
Volume Control Knob	MIN
Balance Control Knob	CENTER
Graphic Equalizer Control	CENTER
Tuning Control Knob	Get it back half a turn from high extreme position.
Reverse Selector Switch	CONT
Beat Cancel Switch	A
Mechanism	OFF
Voltage Selector	220 ~ 240V

1. AC Power Supply Cord — QACCB0057AF09
2. Packing Add., Left — SPAKA1274AFZZ
3. Packing Add., Right — SPAKA1275AFZZ
4. Packing Add., Speaker — SPAKA1276AFZZ
5. Packing Case — SPAKC3175AFZZ
6. Polyethylene Bag, Speaker — SSAKA0005SEZZ
7. Polyethylene Bag, Operation Manual — SSAKA0104AFZZ
8. Polyethylene Bag, Unit — SPAKP0551AFZZ
9. Caution AC Power Supply Cord — TCAUH0056AGZZ
10. Caution Label, Polyethylene Bag — TCAUZ0039AFZZ
11. Warranty Card — TGANE1117AFZZ
12. Operation Manual — TiNSE1029AFZZ
13. Label, MADE IN JAPAN — TLABJ0006AFZZ
14. Label, Special Feature, Speaker — TLABZ0612AFZZ



AC POWER SUPPLY CORD

QACCK0050AFZZ (GF-7850H(D/S))	QACCB0057AF09 (GF-7850E(D))
	

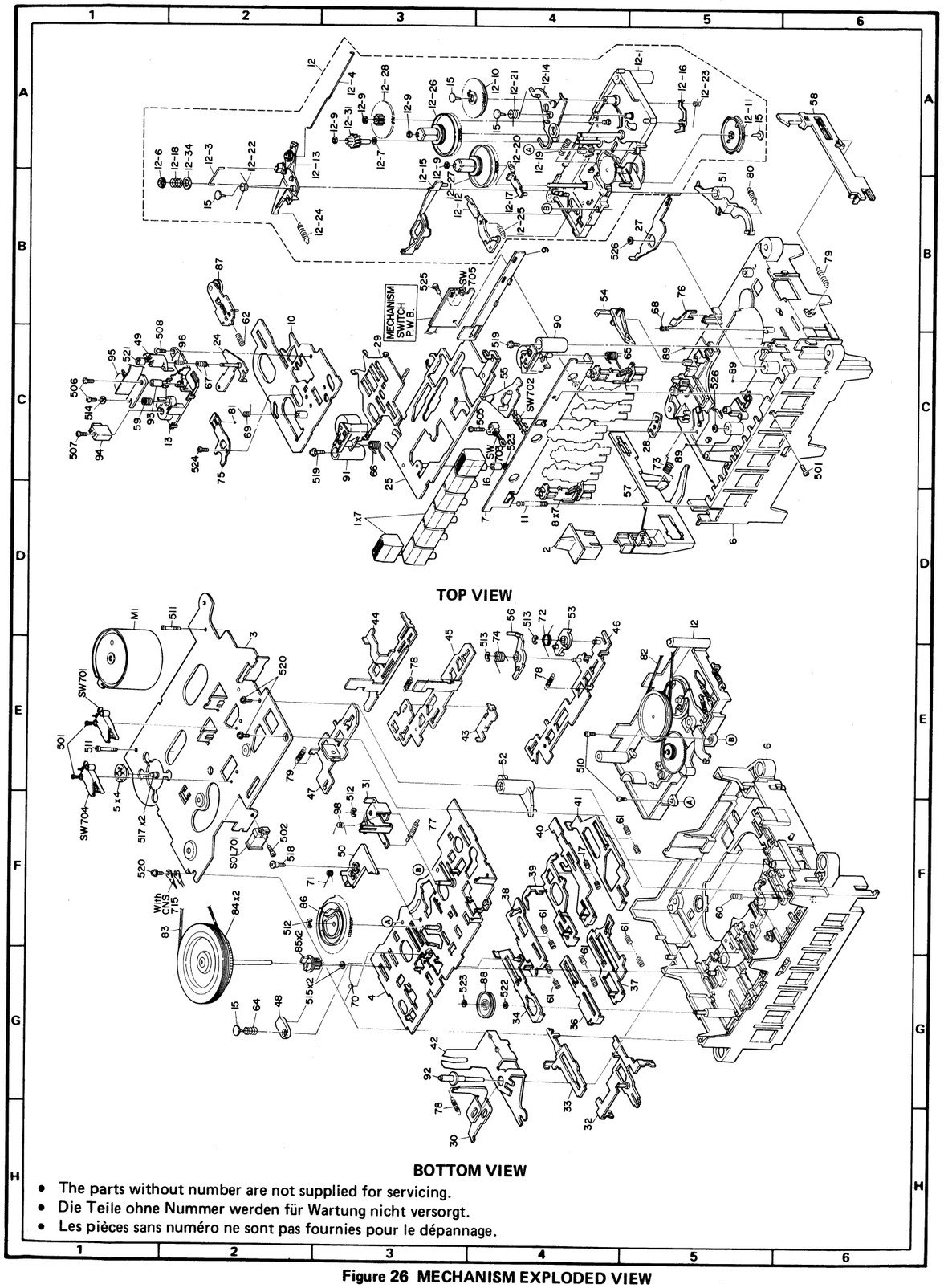


Figure 26 MECHANISM EXPLODED VIEW

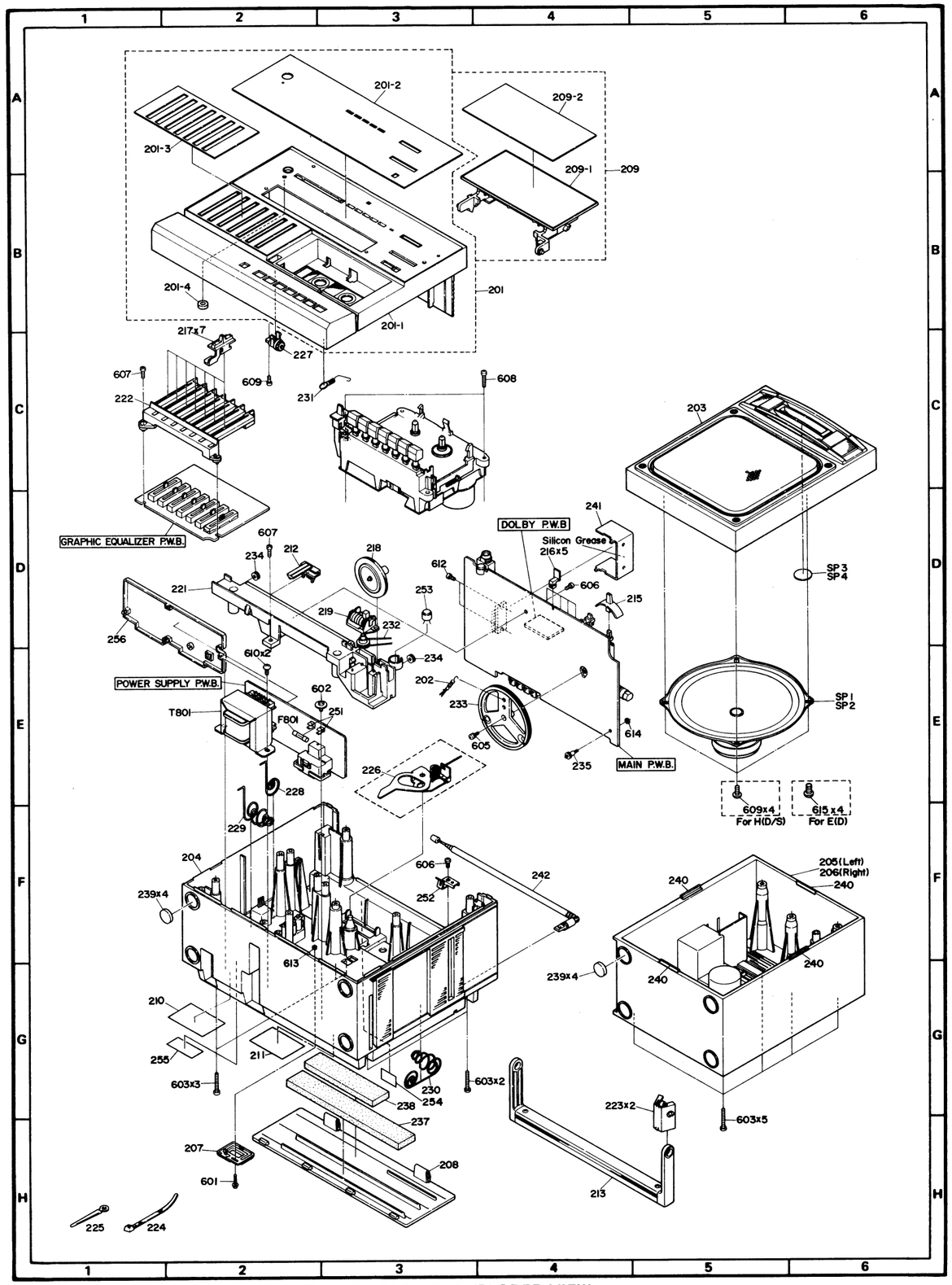


Figure 27 CABINET EXPLODED VIEW

Ⓔ REPLACEMENT PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

Ⓓ ERSATZTEILLISTE

"BESTELLEN VON ERSATZTEILEN"

Um Ihren Auftrag schnell und richtig ausführen zu können, bitten wir um die folgenden Angaben.

1. MODELLNUMMER
2. REF. NR.
3. TEIL NR.
4. BESCHREIBUNG

ANMERKUNGEN:
Die mit ⚠ bezeichneten Teile sind besonders wichtig fur die Aufrechterhaltung der Sicherheit. Beim Wechseln dieser Teile sollten die vorgeschriebenen Teile immer verwendet werden, um sowohl die Sicherheit ais auch die Leistung des Gerätes aufrechtzuerhalten.

Ⓕ LISTE DES PIÈCES DE RECHANGE

"COMMENT COMMANDER DES PIÈCES DE RECHANGE"

Pour voir votre commande exécutée de manière rapide et correcte, veuillez fournir les renseignements suivants.

1. NUMÉRO DU MODÈLE
2. N° DE RÉFÉRENCE
3. N° DE LA PIÈCE
4. DESCRIPTION

NOTE:
Les pièces portant la marque ⚠ sont particulièrement importantes pour le maintien de la securité. S'assurer de les remplacer par des pièces du numéro de pièce spécifié pour maintenir la sécurité et la performance de l' appareil.

REF.NO.	PART NO.	DESCRIPTION	CODE
	INTEGRATED CIRCUITS		
IC1	VHiBA4402//-1	FM Front-End,BA4402	A F
IC2	VHiBA4232AL-1	FM IF/AM Circuit,BA4232 AL	A H
IC3	VHiTA7343P/-1	FM Multiplex,TA7343P	A G
IC101	VHiM51542L/-1	Pre.Amp.,M51542L	A P
IC201	VHiLM1131CN-1	Dolby NR Circuit,LM1131 CN	A Q
IC301	VHiLA4508//-1	Power Amp.,LA4508	A M
IC351	VHiM5226P//-1	Graphic Equalizer Circuit, M5226P	A G
IC352	VHiM5226P//-1	Graphic Equalizer Circuit, M5226P	A G
IC501	VHiLB1416//-1	Level Meter Drive,LB1416	A K
IC601	VHiBA3706//-1	APSS Amp.,BA3706	A L
	TRANSISTORS		
Q1	VS2SC2634TA-R	Silicon,NPN,2SC2634 TA	A C
Q101	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q103	VSRNC1206//-1	Silicon,NPN,RNC1206	A B
Q104	VSRNC1206//-1	Silicon,NPN,RNC1206	A B
Q251	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q252	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q253	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q254	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q255	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q256	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q257	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q258	VS2SC2458GR-1	Silicon,NPN,2SC2458 GR	A B
Q301	VS2SD655E//-1	Silicon,PNP,2SD655 E	A C
Q302	VS2SD655E//-1	Silicon,PNP,2SD655 E	A C
Q401	VS2SD467-C/-1	Silicon,PNP,2SD467 C	A C
Q402	VS2SD467-C/-1	Silicon,PNP,2SD467 C	A C
Q403	VS2SD468-C/-1	Silicon,PNP,2SD468 C	A D
Q500	VSRNC1206//-1	Silicon,NPN,RNC1206	A B
Q700	VS2SD468-C/-1	Silicon,PNP,2SD486 C	A D
Q750	VS2SB739-C/-1	Silicon,PNP,2SB739 C	A D
	DIODES		
D1	VHD1SS211//-1	Silicon,1SS211	A A
D2	VHD1SS211//-1	Silicon,1SS211	A A
D3	VHD1SS211//-1	Silicon,1SS211	A A
D4	VHD1SS211//-1	Silicon,1SS211	A A
D5	RH-PX1072AFZZ	LED,Red,LT3027P	A D
D6	VHERD5R6JB1-1	Zener,5.6V,RD5.6JB1	A B
D100	VHD1SS211//-1	Silicon,1SS211	A A
D101	VHD1SS211//-1	Silicon,1SS211	A A
D102	VHD1SS211//-1	Silicon,1SS211	A A
D103	RH-PX1077AFZZ	LED,RED,Green,9-Segment Display,LT3030M2	A L
D201	VHD1SS211//-1	Silicon,1SS211	A A
D202	VHD1SS211//-1	Silicon,1SS211	A A
D300	VHD11E1TA2/-1	Silicon,11E1	A B
D400	VHERD6R8JB2-1	Zener,6.8V,RD6.8JB2	A B
D500	VHD1SS211//-1	Silicon,1SS211	A A
D501～505	————	Part of REF.NO.D103	—
D550	VHD1SS211//-1	Silicon,1SS211	A A
D551	VHD1SS211//-1	Silicon,1SS211	A A
D552	VHD1SS211//-1	Silicon,1SS211	A A
D553	VHD1SS211//-1	Silicon,1SS211	A A
D554	VHD1SS211//-1	Silicon,1SS211	A A
D555	VHD1SS211//-1	Silicon,1SS211	A A
D556	VHDMC931///-1	Silicon,MC931	A C
D557	VHD1SS211//-1	Silicon,1SS211	A A
D600	VHD11E1TA2/-1	Silicon,11E1	A B
D700	————	Part of REF.NO.D103	—
D701	VHERD120JB2-1	Zener,12V,RD12JB2	A C
D750	VHD1SS211//-1	Silicon,1SS211	A A
D751,752	————	Part of REF.NO.D103	—
D801	VHD10E-4NFD-1	Silicon,10E4NFD	A B
D802	VHD10E-4NFD-1	Silicon,10E4NFD	A B
D803	VHD10E-4NFD-1	Silicon,10E4NFD	A B
D804	VHD10E-4NFD-1	Silicon,10E4NFD	A B
	FILTERS		
CF1	RFiLF0080AFZZ	FM IF,10.7 MHz	A D
CF2	RFiLA0085AFZZ	AM IF,455 kHz,H(D/S)	A E
CF2	RFiLA0086AFZZ	AM IF,468 kHz,E(D)	A E
FIL201	RCiLL0076AFZZ	Dolby Multiplex	A G
FIL202	RCiLL0076AFZZ	Dolby Multiplex	A G
	TRANSFORMERS		
T1	RCiLi0324AFZZ	FM IF	A C
T2	RCiLi0338AFZZ	FM Detector	A C
T3	RCiLi0339AFZZ	AM IF	A C
⚠T801	RTRNP1073AFZZ	Power	A X

REF.NO.	PART NO.	DESCRIPTION	CODE
		COILS	
L1	RCiLA0652AFZZ	FM Band Pass Filter	A D
L2	RCiLB0672AFZZ	FM RF	A C
L3	RCiLB0628AFZZ	FM Oscillator,H(D/S)	A C
L3	RCiLB0707AFZZ	FM Oscillator,E(D)	A C
L6	RCiLA0562AFZZ	SW Antenna	A C
L7	RCiLA0723AFZZ	LW/MW Bar Antenna	A M
L8	RCiLB0629AFZZ	SW Oscillator	A C
L9	RCiLB0623AFZZ	MW Oscillator	A C
L10	RCiLB0627AFZZ	LW Oscillator	A C
L181	RCiLZ0125AFZZ	47 mH,Bias Trap	A C
L182	RCiLZ0125AFZZ	47 mH,Bias Trap	A C
L251	RCiLZ0129AFZZ	6.8 mH,Choke	A C
L252	RCiLZ0129AFZZ	6.8 mH,Choke	A C
L400	VP-DH471K0000	470 μH,Choke	A B
L401	RCiLB0661AFZZ	Bias Oscillator	A F
⚠L750	RCiLF0014AGZZ	47 μH,Choke,H(D/S) Only	A B
		CONTROLS	
TC3	RTō-H1072AFZZ	Trimmer,SW Antenna	A C
TC5	RTō-H1072AFZZ	Trimmer,LW Antenna	A C
TC6	RTō-H1072AFZZ	Trimmer,SW Oscillator	A C
TC8	RTō-H1072AFZZ	Trimmer,LW Oscillator	A C
VC1~4	RVC-R0083AFZZ	Variable Capacitors,with Trimmers	A N
VR1	RVR-M0447AFZZ	5 kohms (B)	A B
VR101	RVR-M0445AFZZ	2 kohms (B)	A B
VR102	RVR-M0445AFZZ	2 kohms (B)	A B
VR251	RVR-M0467AFZZ	50 kohms (B)	A B
VR252	RVR-M0467AFZZ	50 kohms (B)	A B
VR350	RVR-Z0191AFZZ	100 kohm (G)	A G
VR351	RVR-Z0191AFZZ	100 kohm (G)	A G
VR352	RVR-Z0191AFZZ	100 kohm (G)	A G
VR353	RVR-Z0191AFZZ	100 kohm (G)	A G
VR354	RVR-Z0191AFZZ	100 kohm (G)	A G
VR355	RVR-Q0163AFZZ	50 kohms (G)	A F
VR356	RVR-Q0162AFZZ	20 kohms (U)	A G
VR401	RVR-M0452AFZZ	100 kohm (B)	A B
VR402	RVR-M0452AFZZ	100 kohm (B)	A B

ELECTROLYTIC CAPACITORS

(All electrolytic capacitors are ±20% type.)

C17	RC-EZA226AF1C	22 μF,16V	A G
C19	RC-EZA105AF1H	1 μF,50V	A B
C21	RC-EZA476AF1A	47 μF,10V	A B
C40	RC-EZA106AF1C	10 μF,16V	A B
C41	RC-EZA335AF1E	3.3 μF,25V	A B
C42	RC-EZY105AF1H	1 μF,50V	A B
C44	RC-EZY475AF1H	4.7 μF,50V	A B
C47	RC-EZA105AF1H	1 μF,50V	A B
C48	RC-EZA105AF1H	1 μF,50V	A B
C49	RC-GZV227AF1C	220 μF,16V	A B
C50	VCEAAA1EW106Y	10 μF,25V	A C
C74	RC-EZA106AF1C	10 μF,16V	A B
C75	RC-EZA476AF1A	47 μF,10V	A B
C100	RC-GZA107AF1C	100 μF,16V	A B
C103	RC-EZA105AF1H	1 μF,50V	A B
C109	RC-EZA105AF1H	1 μF,50V,E(D)	A B
C109	RC-EZV105AF1H	1 μF,50V,H(D/S)	A B
C143	RC-EZY105AF1H	1 μF,50V	A B
C144	RC-EZA105AF1H	1 μF,50V	A B
C147	RC-EZA476AF1A	47 μF,10V	A B
C148	RC-EZA476AF1A	47 μF,10V	A B
C149	RC-EZY105AF1H	1 μF,50V	A B
C150	RC-EZA105AF1H	1 μF,50V	A B
C153	RC-GZA107AF1A	100 μF,10V	A C
C154	RC-EZA226AF1C	22 μF,16V	A G
C163	RC-EZA476AF1A	47 μF,10V	A B
C164	RC-EZA476AF1A	47 μF,10V	A B
C165	RC-EZA105AF1H	1 μF,50V	A B
C166	RC-EZA105AF1H	1 μF,50V	A B
C168	RC-EZA106AF1C	10 μF,16V	A B
C170	RC-GZA227AF1E	220 μF,25V	A C
C181	RC-EZA335AF1E	3.3 μF,25V	A B
C182	RC-EZA335AF1E	3.3 μF,25V	A B
C201	RC-EZA106AF1C	10 μF,16V	A B
C202	RC-EZA106AF1C	10 μF,16V	A B
C205	RC-EZY334AF1H	0.33 μF,50V	A B
C206	RC-EZY334AF1H	0.33 μF,50V	A B
C211	RC-EZA106AF1C	10 μF,16V	A B
C212	RC-EZA106AF1C	10 μF,16V	A B
C217	RC-EZY105AF1H	1 μF,50V	A B
C218	RC-EZY105AF1H	1 μF,50V	A B
C219	RC-EZA105AF1H	1 μF,50V	A B
C220	RC-EZA105AF1H	1 μF,50V	A B
C221	RC-EZA105AF1H	1 μF,50V	A B
C222	RC-EZA105AF1H	1 μF,50V	A B
C223	RC-GZA227AF1A	220 μF,10V	A B
C251	RC-EZY105AF1H	1 μF,50V	A B
C252	RC-EZY105AF1H	1 μF,50V	A B
C257	RC-EZY335AF1H	3.3 μF,50V	A B
C258	RC-EZY335AF1H	3.3 μF,50V	A B
C265	RC-EZY476AF1C	47 μF,16V	A B
C300	RC-EZA475AF1E	4.7 μF,25V	A B
C301	RC-EZA105AF1H	1 μF,50V	A B
C302	RC-EZA105AF1H	1 μF,50V	A B
C305	RC-GZA107AF1A	100 μF,10V	A C
C306	RC-GZA107AF1A	100 μF,10V	A C
C309	RC-GZA107AF1A	100 μF,10V	A C
C310	RC-GZA107AF1A	100 μF,10V	A C
C313	RC-GZV108AF1A	1000 μF,10V	A D
C314	RC-GZV108AF1A	1000 μF,10V	A D
C315	RC-GZA227AF1E	220 μF,25V,H(D/S)	A C
C315	RC-GZA337AF1C	330 μF,16V,E(D)	A C
C316	RC-EZ1179AFZZ	2200 μF,25V	A G
C350	RC-GZA107AF1C	100 μF,16V	A B
C353	RC-EZY105AF1H	1 μF,50V	A B
C354	RC-EZY105AF1H	1 μF,50V	A B
C355	RC-EZY105AF1H	1 μF,50V	A B
C356	RC-EZY105AF1H	1 μF,50V	A B
C357	RC-EZY334AF1H	0.33 μF,50V	A B
C358	RC-EZY334AF1H	0.33 μF,50V	A B
C377	RC-EZY105AF1H	1 μF,50V	A B
C378	RC-EZY105AF1H	1 μF,50V	A B
C379	RC-EZY226AF1C	22 μF,16V	A B
C403	RC-GZA227AF1C	220 μF,16V	A B
C413	RC-GZA227AF1C	220 μF,16V	A B
C501	RC-EZA105AF1H	1 μF,50V	A B
C520	RC-GZA107AF1C	100 μF,16V	A B
C521	RC-EZA474AF1H	0.47 μF,50V	A B
C522	RC-EZA474AF1H	0.47 μF,50V	A B
C523	RC-EZA225AF1H	2.2 μF,50V	A B
C524	RC-EZA106AF1C	10 μF,16V	A B
C550	RC-EZA106AF1C	10 μF,16V,E(D)	A B
C550	RC-EZV106AF1C	10 μF,16V,H(D/S)	A B
C551	RC-EZA335AF1E	3.3 μF,25V	A B
C552	RC-EZA475AF1E	4.7 μF,25V	A B
C600	RC-EZA105AF1H	1 μF,50V	A B
C601	RC-EZA474AF1H	0.47 μF,50V	A B
C602	RC-EZA474AF1H	0.47 μF,50V	A B
C603	RC-EZA474AF1H	0.47 μF,50V	A B
C604	RC-GZA107AF1C	100 μF,16V	A C
C605	RC-EZA474AF1H	0.47 μF,50V	A B
C703	RC-GZV477AF1C	470 μF,16V	A C
C750	RC-GZA227AF1E	220 μF,25V,E(D)	A C
C750	RC-GZV227AF1E	220 μF,25V,H(D/S)	A C

CAPACITORS

There are two types of capacitors available and they can be identified from each other by reading their Part Numbers.

- Ceramic type capacitor;
  A symbol "C" or "K" is given at the 3rd digit of its Part Number like "VCC (or K)·····J."
- Semiconductor type capacitor:
  A symbol "T" is given at the 3rd digit of its Part Number like "VCT·····J."

The capacitance error of each capacitor is indicated by the symbol given at the 13th digit of the Part Number as follows:"J" (±5%), "K" (±10%), "M" (±20%), "N" (±30%), "C" (±0.25 pF), "D" (±0.5 pF), "Z" (+80−20%).
(Tubular type ceramic capacitor is identified by the symbol MF of the part NO. VC00MF0000000; this MF does not mean the lead wire.)

C1	VCCSMF1HL100J	10 pF,50V	A A
C2	VCTYMF1HV472K	0.0047 μF,50V	A A
C3	VCTYMF1HV472K	0.0047 μF,50V	A A
C4	VCCCMF1HH240J	24 pF (CH),50V	A A
C6	VCCCBT1HH150J	15 pF (CH),50V	A A
C7	VCCCBT1HH100J	10 pF (CH),50V,E(D)	A A
C7	VCCCPU1HH100D	10 pF (CH),50V,H(D/S)	A A
C8	VCTYMF1HV152K	0.0015 μF,50V	A A
C9	VCCRBT1HH100J	10 pF (RH),50V	A A
C10	VCCRMF1HH8R2D	8.2 pF (RH),50V	A A
C11	VCCCBT1HH1R0C	1 pF (CH),50V,H(D/S)	A A
C11	VCCCBT1HH2R2C	2.2 pF (CH),50V,E(D)	A A
C12	VCTYBT1CY103N	0.01 μF,16V	A A
C15	VCTYMF1NY333N	0.033 μF,12V	A A
C18	VCTYPA1EX103K	0.01 μF,25V	A A
C20	VCTYPA1EX103K	0.01 μF,25V	A A
C22	VCTYPA1EX223J	0.022 μF,25V	A A
C23	VCTYPA1EX223J	0.022 μF,25V	A A
C24	VCTYPA1EX223J	0.022 μF,25V	A A
C25	VCCSPA1HL271J	270 pF,50V	A A
C26	VCTYPA1EX223J	0.022 μF,25V	A A
C27	VCCSPA1HL470J	47 pF,50V	A A
C43	VCQSMU1HS102J	0.001 μF,50V,Styrol	A B
C45	VCQYVU1HA223J	0.022 μF,50V,Mylar	A B
C46	VCQYVU1HA223J	0.022 μF,50V,Mylar	A B
C61	VCCSMF1HL8R2D	8.2 pF,50V	A A
C62	VCCSMF1HL750J	75 pF,50V	A A
C64	VCCSPV1HL331J	330 pF,50V	A A
C65	VCCSBT1HL330J	33 pF,50V	A A
C66	VCCCBT1HH200J	20 pF (CH),50V	A A
C67	VCKYMF1HB271K	270 pF,50V	A A
C69	VCCCPA1HH181J	180 pF,50V,H(D/S)	A A
C69	VCCCPV1HH181J	180 pF,50V,E(D)	A A
C70	VCCCMF1HH390J	39 pF (CH),50V	A A
C71	VCTYPV1EX332K	0.0033 μF,25V	A A
C72	VCTYMF1CY223N	0.022 μF,16V	A A
C73	VCTYPA1EX223J	0.022 μF,25V	A A
C76	VCCCBT1HH6R8D	6.8 pF (CH),50V	A A
C77	VCTYMF1CY223N	0.022 μF,16V	A A
C101	VCFYHA1HA104J	0.1 μF,50V,Polyester	A B
C105	VCKYMF1HB271K	270 pF,50V	A A
C107	VCKYBT1HB221K	220 pF,50V	A A
C141	VCCSPA1HL471J	470 pF,50V	A A
C142	VCCSPA1HL471J	470 pF,50V	A A
C145	VCTYPA1EX223J	0.022 μF,25V	A A
C146	VCTYPA1EX223J	0.022 μF,25V	A A
C151	VCTYPA1EX273J	0.027 μF,25V	A B
C152	VCTYPA1EX273J	0.027 μF,25V	A B
C161	VCKYBT1HB471K	470 pF,50V	A A
C162	VCKYBT1HB471K	470 pF,50V	A A
C167	VCKYBT1HB681K	680 pF,50V	A A
C183	VCKYMF1HB561J	560 pF,50V	A A
C184	VCKYMF1HB561J	560 pF,50V	A A
C203	VCFYHU1HA104J	0.1 μF,50V,Polyester	A B
C204	VCFYHU1HA104J	0.1 μF,50V,Polyester	A B
C207	VCFYHU1HA473J	0.047 μF,50V,Polyester	A B
C208	VCFYHU1HA473J	0.047 μF,50V,Polyester	A B
C209	VCQYVU1HA333J	0.033 μF,50V,Mylar	A B
C210	VCQYVU1HA333J	0.033 μF,50V,Mylar	A B
C213	VCTYPA1EX472K	0.0047 μF,25V	A A
C214	VCTYPA1EX472K	0.0047 μF,25V	A A
C215	VCKYBT1HB471K	470 pF,50V	A A
C216	VCKYBT1HB471K	470 pF,50V	A A
C253	VCCSPA1HL680J	68 pF,50V	A A
C254	VCCSPA1HL680J	68 pF,50V	A A
C255	VCTYPA1EX103K	0.01 μF,25V	A A
C256	VCTYPA1EX103K	0.01 μF,25V	A A
C259	VCTYPA1EX222K	0.0022 μF,25V	A A
C260	VCTYPA1EX222K	0.0022 μF,25V	A A
C261	VCTYPA1EX682K	0.0068 μF,25V	A A
C262	VCTYPU1EX682K	0.0068 μF,25V	A A
C263	VCTYBT1CX472N	0.0047 μF,16V	A A
C264	VCTYBT1CX472N	0.0047 μF,16V	A A
C303	VCKYMF1HB102K	0.001 μF,50V	A A
C304	VCKYMF1HB102K	0.001 μF,50V	A A
C307	VCTYBT1CY103N	0.01 μF,16V	A A
C308	VCTYBT1CY103N	0.01 μF,16V	A A
C311	RC-QZV154AFYK	0.15 μF,25V,Mylar	A C
C312	RC-QZV154AFYK	0.15 μF,25V,Mylar	A C
C317	VCFYHA1HA104J	0.1 μF,50V,Polyester	A B
C351	VCKYPA1HB102K	0.001 μF,50V	A A
C352	VCKYPA1HB102K	0.001 μF,50V	A A
C359	VCFYHU1HA104J	0.1 μF,50V,Polyester	A B
C360	VCFYHU1HA104J	0.1 μF,50V,Polyester	A B
C361	VCTYPA1EX333K	0.033 μF,25V	A A
C362	VCTYPA1EX333K	0.033 μF,25V	A A
C363	VCTYPA1EX103K	0.01 μF,25V	A A
C364	VCTYPA1EX103K	0.01 μF,25V	A A
C365	VCTYPA1EX473K	0.047 μF,25V	A A
C366	VCTYPA1EX473K	0.047 μF,25V	A A
C367	VCTYPA1EX153K	0.015 μF,25V	A A
C368	VCTYPA1EX153K	0.015 μF,25V	A A
C369	VCTYPA1EX472K	0.0047 μF,25V	A A
C370	VCTYPA1EX472K	0.0047 μF,25V	A A
C371	VCKYPA1HB152K	0.0015 μF,50V	A A
C372	VCKYPA1HB152K	0.0015 μF,50V	A A
C373	VCCSPA1HL471J	470 pF,50V	A A
C374	VCCSPA1HL471J	470 pF,50V	A A
C375	VCKYPA1HB102K	0.001 μF,50V	A A
C376	VCKYPA1HB102K	0.001 μF,50V	A A
C383	VCFYHU1HA104J	0.1 μF,50V,Polyester	A B
C384	VCFYHU1HA104J	0.1 μF,50V,Polyester	A B
C400	VCQPKV2AA302J	0.003 μF,100V, Polypropylene	A B
C401	VCKYBT1HB221K	220 pF,50V	A A
C402	VCKYBT1HB221K	220 pF,50V	A A
C404	VCCSPA1HL221J	220 pF,50V	A A
C405	VCQPKA2AA681J	680 pF,100V,Polypropylene	A B
C406	VCTYPA1EX273J	0.027 μF,25V	A B
C407	VCTYPA1EX183J	0.018 μF,25V	A A
C408	**VCTYPA1EX392K**	0.0039 μF,25V	A B
C409	**VCTYPA1EX392K**	0.0039 μF,25V	A B
C410	**VCTYPA1EX472K**	0.0047 μF,25V	A A
C411	VCTYPA1EX223J	0.022 μF,25V	A A
C412	VCTYBT1CY103N	0.01 μF,16V	A A
C502	VCTYPA1EX223J	0.022 μF,25V	A A
C553	VCTYPA1EX223J	0.022 μF,25V	A A
C700	VCTYMF1CY223N	0.022 μF,16V	A A
C701	VCTYMF1CY223N	0.022 μF,16V	A A
C702	VCTYMF1CY223N	0.022 μF,16V	A A
C753	VCTYPU1EX103M	0.01 μF,25V	A A
C801	VCKZPV1HF104Z	0.1 μF,50V	A C
C802	VCKZPV1HF104Z	0.1 μF,50V	A C

REF.NO.	PART NO.	DESCRIPTION	CODE
C803	VCKZPV1HF104Z	0.1 μF,50V	A C
C804	VCKZPV1HF104Z	0.1 μF,50V	A C

RESISTORS

(Unless otherwise specified, resistors are ±5%,carbon type.) (Tubular type carbon film resistor ±5% is identified the symbol MF of the part NO. VRD—MF0000000; this MF does not mean lead wire.)

REF.NO.	PART NO.	DESCRIPTION	CODE
	VRD-MF2EE000C	0 ohm,1/4W,Jumper	A A
R1	VRD-MF2EE391J	390 ohms,1/4W	A A
R3	VRD-ST2CD182J	1.8 kohms,1/6W	A A
R4	VRD-ST2CD181J	180 ohms,1/6W	A A
R5	VRD-MF2EE224J	220 kohms,1/4W	A A
R6	VRD-MF2EE224J	220 kohms,1/4W	A A
R7	VRD-ST2CD563J	56 kohms,1/6W	A A
R8	VRD-MF2EE471J	470 ohms,1/4W	A A
R9	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R40	VRD-ST2CD471J	470 ohms,1/6W	A A
R41	VRD-ST2CD102J	1 kohm,1/6W	A A
R42	VRD-ST2CD103J	10 kohm,1/6W	A A
R43	VRD-ST2CD184J	180 kohms,1/6W	A A
R44	VRD-ST2CD471J	470 ohms,1/6W	A A
R45	VRD-ST2CD332J	3.3 kohms,1/6W	A A
R46	VRD-ST2CD332J	3.3 kohms,1/6W	A A
R47	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R48	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R49	VRD-ST2CD471J	470 ohms,1/6W	A A
R51	VRD-ST2CD102J	1 kohm,1/6W	A A
R61	VRD-ST2CD101J	100 ohm,1/6W	A A
R62	VRD-MF2EE101J	100 ohm,1/4W	A A
R63	VRD-ST2CD330J	33 ohms,1/6W	A A
R100	VRD-MF2EE271J	270 ohms,1/4W	A A
R101	VRD-ST2CD222J	2.2 kohms,1/6W	A A
R102	VRD-ST2CD221J	220 ohms,1/6W	A A
R103	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R105	VRD-ST2CD103J	10 kohm,1/6W	A A
R107	VRD-MF2EE222J	2.2 kohms,1/4W	A A
R109	VRD-MF2EE474J	470 kohms,1/4W	A A
R113	VRD-ST2CD101J	100 ohm,1/6W	A A
R115	VRD-ST2CD104J	100 kohm,1/6W	A A
R117	VRD-MF2EE333J	33 kohms,1/4W	A A
R118	VRD-MF2EE333J	33 kohms,1/4W	A A
R120	VRD-MF2EE104J	100 kohm,1/4W	A A
R131	VRD-ST2CD102J	1 kohm,1/6W	A A
R132	VRD-ST2CD102J	1 kohm,1/6W	A A
R135	VRD-ST2CD682J	6.8 kohms,1/6W	A A
R136	VRD-ST2CD682J	6.8 kohms,1/6W	A A
R137	VRD-ST2CD821J	820 ohms,1/6W	A A
R138	VRD-ST2CD821J	820 ohms,1/6W	A A
R141	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R142	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R143	VRD-ST2CD154J	150 kohms,1/6W	A A
R144	VRD-ST2CD154J	150 kohms,1/6W	A A
R147	VRD-ST2CD683J	68 kohms,1/6W	A A
R148	VRD-ST2CD683J	68 kohms,1/6W	A A
R149	VRD-ST2CD103J	10 kohm,1/6W	A A
R150	VRD-ST2CD103J	10 kohm,1/6W	A A
R151	VRD-ST2CD332J	3.3 kohms,1/6W	A A
R152	VRD-ST2CD332J	3.3 kohms,1/6W	A A
R153	VRD-ST2CD272J	2.7 kohms,1/6W	A A
R154	VRD-ST2CD272J	2.7 kohms,1/6W	A A
R155	VRD-ST2CD104J	100 kohm,1/6W	A A
R156	VRD-ST2CD104J	100 kohm,1/6W	A A
R157	VRD-ST2CD103J	10 kohm,1/6W	A A
R158	VRD-ST2CD103J	10 kohm,1/6W	A A
R160	VRD-MF2EE103J	10 kohm,1/4W	A A
R161	VRD-ST2CD822J	8.2 kohms,1/6W	A A
R162	VRD-ST2CD822J	8.2 kohms,1/6W	A A
R163	VRD-ST2CD102J	1 kohm,1/6W	A A
R164	VRD-ST2CD102J	1 kohm,1/6W	A A
R165	VRD-ST2CD122J	1.2 kohms,1/6W	A A
R166	VRD-ST2CD122J	1.2 kohms,1/6W	A A
R167	VRD-ST2CD473J	47 kohms,1/6W	A A
R168	VRD-ST2CD473J	47 kohms,1/6W	A A
R169	VRD-ST2CD822J	8.2 kohms,1/6W	A A
R170	VRD-ST2CD822J	8.2 kohms,1/6W	A A
R171	VRD-ST2CD103J	10 kohm,1/6W	A A
R172	VRD-ST2CD103J	10 kohm,1/6W	A A
R174	VRD-ST2CD330J	33 ohms,1/6W	A A
R175	VRD-ST2EE680J	68 ohms,1/4W	A A
R181	VRD-MF2EE682J	6.8 kohms,1/4W	A A
R182	VRD-MF2EE682J	6.8 kohms,1/4W	A A
R190	VRD-ST2EE122J	1.2 kohms,1/4W	A A
R200	VRD-ST2EE471J	470 ohms,1/4W	A A
R201	VRD-ST2CD471J	470 ohms,1/6W	A A
R202	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R203	VRD-ST2CD683J	68 kohms,1/6W	A A
R204	VRD-ST2CD683J	68 kohms,1/6W	A A
R205	VRD-ST2CD274J	270 kohms,1/6W	A A
R206	VRD-ST2CD274J	270 kohms,1/6W	A A
R207	VRD-ST2CD473J	47 kohms,1/6W	A A
R208	VRD-ST2CD473J	47 kohms,1/6W	A A
R209	VRD-ST2CD332J	3.3 kohms,1/6W	A A
R210	VRD-ST2CD332J	3.3 kohms,1/6W	A A
R211	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R212	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R250	VRD-ST2EE221J	220 ohms,1/4W	A A
R251	VRD-SU2EE105J	1 Mohm,1/4W	A A
R252	VRD-SU2EE105J	1 Mohm,1/4W	A A
R253	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R254	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R255	VRD-ST2CD222J	2.2 kohms,1/6W	A A
R256	VRD-ST2CD222J	2.2 kohms,1/6W	A A
R257	VRD-ST2CD470J	47 ohms,1/6W	A A
R258	VRD-ST2CD470J	47 ohms,1/6W	A A
R259	VRD-ST2CD153J	15 kohms,1/6W	A A
R260	VRD-ST2CD153J	15 kohms,1/6W	A A
R261	VRD-ST2CD152J	1.5 kohms,1/6W	A A
R262	VRD-SA2CD152J	1.5 kohms,1/6W	A A
R263	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R264	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R265	VRD-ST2CD392J	3.9 kohms,1/6W	A A
R266	VRD-ST2CD392J	3.9 kohms,1/6W	A A
R301	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R302	VRD-ST2CD472J	4.7 kohms,1/6W	A A
R303	VRD-ST2CD105J	1 Mohm,1/6W	A A
R307	VRD-MF2EE151J	150 ohms,1/4W	A A
R308	VRD-MF2EE151J	150 ohms,1/4W	A A
R350	VRD-ST2EE101J	100 ohm,1/4W	A A
R351	VRD-ST2CD183J	18 kohms,1/6W	A A
R352	VRD-ST2CD183J	18 kohms,1/6W	A A
R353	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R354	VRD-ST2CD562J	5.6 kohms,1/6W	A A
R359	VRD-ST2CD183J	18 kohms,1/6W	A A
R360	VRD-ST2CD183J	18 kohms,1/6W	A A
R363	VRD-ST2CD472J	4.7 ohms,1/6W	A A
R364	VRD-ST2CD472J	4.7 ohms,1/6W	A A
R403	VRD-ST2CD183J	18 kohms,1/6W	A A
R404	VRD-ST2CD183J	18 kohms,1/6W	A A
R405	VRD-ST2EE4R7J	4.7 ohms,1/4W	A A
R406	VRD-ST2EE4R7J	4.7 ohms,1/4W	A A
R407	VRD-ST2EE820J	82 ohms,1/4W	A A
R408	VRD-ST2EE820J	82 ohms,1/4W	A A
R409	VRD-MF2EE102J	1 kohm,1/4W	A A
R410	VRD-ST2CD471J	470 ohms,1/6W	A A
⚠R411	VRG-ST2EF100J	10 ohm, 1/4W, Fusible	A B
R501	VRD-ST2CD102J	1 kohm,1/6W	A A
R504	VRD-ST2CD100J	10 ohm,1/6W	A A
R505	VRD-ST2CD123J	12 kohms,1/6W	A A

REF.NO.	PART NO.	DESCRIPTION	CODE
R507	VRD-ST2CD272J	2.7 kohms,1/6W	A A
R508	VRD-ST2CD392J	3.9 kohms,1/6W	A A
⚠R520	VRG-ST2EC470J	47 ohms,1/4W,Fusible,H(D/S)	A B
⚠R520	VRG-ST2EF470J	47 ohms,1/4W,Fusible,E(D)	A B
R521	VRD-ST2CD273J	27 kohms,1/6W	A A
R522	VRD-ST2CD273J	27 kohms,1/6W	A A
R523	VRD-ST2CD103J	10 kohm,1/6W	A A
R524	VRD-ST2CD103J	10 kohm,1/6W	A A
R525	VRD-MF2EE104J	100 kohm,1/4W	A A
R526	VRD-MF2EE103J	10 kohm,1/4W	A A
R527	VRD-MF2EE221J	220 ohms,1/4W	A A
R528	VRD-MF2EE221J	220 ohms,1/4W	A A
R529	VRD-MF2EE221J	220 ohms,1/4W	A A
R530	VRD-MF2EE221J	220 ohms,1/4W	A A
R531	VRD-MF2EE221J	220 ohms,1/4W	A A
R550	VRD-ST2CD104J	100 kohm,1/6W	A A
R551	VRD-MF2EE822J	8.2 kohms,1/4W	A A
R552	VRD-ST2CD822J	8.2 kohms,1/6W	A A
R553	VRD-ST2CD102J	1 kohm,1/6W	A A
R554	VRD-ST2CD470J	47 ohms,1/6W	A A
R555	VRD-ST2CD470J	47 ohms,1/6W	A A
R556	VRD-MF2EE103J	10 kohm,1/4W	A A
R557	VRD-MF2EE102J	1 kohm,1/4W	A A
R600	VRD-ST2CD273J	27 kohms,1/6W	A A
R601	VRD-ST2CD224J	220 kohms,1/6W	A A
R602	VRD-ST2CD224J	220 kohms,1/6W	A A
R603	VRD-ST2CD563J	56 kohms,1/6W	A A
R604	VRD-MF2EE561J	560 ohms,1/4W	A A
R605	VRD-MF2EE103J	10 kohm,1/4W	A A
R620	VRD-ST2EE221J	220 ohms,1/4W	A A
R621	VRD-ST2EE221J	220 ohms,1/4W	A A
R700	VRD-MF2EE471J	470 ohms,1/4W	A A
⚠R701	VRG-ST2EF100J	10 ohm, 1/4W, Fusible	A B
R702	VRD-MF2EE152J	1.5 kohms,1/4W	A A
⚠R750	VRG-ST2EG2R2J	2.2 ohms,1/4W,Fusible,E(D)	A B
⚠R750	VRG-ST2EG4R7J	4.7 ohms,1/4W,Fusible, H(D/S)	A B
R751	VRD-MF2EE152J	1.5 kohms,1/4W	A A
R752	VRD-MF2EE152J	1.5 kohms,1/4W	A A
R753	VRD-ST2EE152J	1.5 kohms,1/4W	A A

OTHER CIRCUITRY PARTS

	QCNW-2442AFZZ	Speaker Cord	A E
BI201	QCNCM669GAFZZ	Connector Assembly,7-7 Pin	A D
BI202	QCNCM669JAFZZ	Connector Assembly,9-9 Pin	A E
BI203	QCNCM669CAFZZ	Connector Assembly,3-3 Pin	A C
BI301	QCNW-2679AFZZ	Connector Assembly,5-2 Pin	A F
BI401	QCNW-2683AFZZ	Connector Asembly,2-3Pin	A D
CNP101	QCNCM136CAFZZ	Plug,3Pin	A B
CNP301	QCNCM095BAF02	Plug,2Pin	A A
CNP401	————	Part of REF.NO.BI401	—
CNP601	QCNCM633CAFZZ	Plug,3Pin	A C
CNP602	QCNCM633CAFZZ	Plug,3Pin	A C
CNP751	QCNCM593MAFZZ	Plug,12Pin	A C
CNS101	QCNW-2681AFZZ	Connector Assembly,3Pin	A E
CNS301	————	Part of REF.NO.BI301	—
CNS351	QCNCM659FAFZZ	Connector Assembly,6Pin	A C
CNS401	QCNW-2682AFZZ	Connector Assembly,2Pin	A D
CNS601	QCNCW459CAFZZ	Connector Assembly,3Pin	A C
CNS602	QCNCW459CAFZZ	Connector Assembly,3Pin	A C
CNS751	QCNW-2680AFZZ	Connector Assembly,12Pin	A G
⚠F801	QFS-C162EAFNi	Fuse,T1.6A/250V	A D
J101	QJAKE0114AFZZ	Jack,External Microphone	A E
J301	QJAKJ0133AFZZ	Jack,Headphones	A F

REF.NO.	PART NO.	DESCRIPTION	CODE
M1	RMŌTV0183AF01	Motor With Pulley	A U
SO101	QSŌCD4513AFZZ	Socket,Record/Playback DIN	A G
SO301	QTANZ0468AFZZ	Terminal,External Speaker	A E
⚠SO801	QSŌCA0370AFZZ	Socket,AC Power Supply With AC/DC Selector Switch	A G
SOL701	RPLU-0185AFZZ	Solenoid	A F
SP1	VSP0012PB77SA	Speaker,Woofer,Left	A N
SP2	VSP0012PB77SA	Speaker,Woofer,Right	A N
SP3	RALMB0057AFZZ	Speaker,Ceramic Tweeter, Left	A C
SP4	RALMB0057AFZZ	Speaker,Ceramic Tweeter, Right	A C
SW1	QSW-B0198AFZZ	Switch,Slide Type	A M
SW101	QSW-P0568AFZZ	Switch,Push Type	A N
SW102	QSW-S0447AFZZ	Switch,Slide Type	A G
SW403	QSW-S0267AFZZ	Switch,Slide Type	A D
SW701	QSW-F0136AFZZ	Switch,Skeleton Type	A D
SW702	QSW-F0205AFZZ	Switch,Leaf Type	A C
SW703	QSW-F0206AFZZ	Switch,Leaf Type	A C
SW704	QSW-F0207AFZZ	Switch,Skeleton Type	A D
SW705	QSW-S0420AFZZ	Switch,Slide Type	A E

MECHANICAL PARTS

1	JKNBM0483AFSA	Button,Mechanism Operation	A D
2	JKNBR0246AFSA	Knob,Mode Selector	A D
3	LANGF0904AFZZ	Bracket,Motor	A H
4	LANGG0125AFZZ	Chassis,Back	A F
5	LBSHZ0086AFZZ	Bushing,Motor	A A
6	————	Main Chassis	—
7	LANGF0903AFZZ	Bracket,Operation Button Pressure	A C
8	MLEVP0559AFZZ	Lever,Opration Button	A A
9	MLEVP0560AFZZ	Lever,Prevention	A B
10	LCHSS0209AFZZ	Sub-chassis	A E
11	MSPRC0516AFFJ	Spring,Prevention	A B
12	LCHSZ0174AF00	Take-Up/Supply Turntable Block Assembly	A T
12-01	————	Chassis,Take-Up/Supply Turntable	—
12-03	LPiNZ0062AFFJ	Pin,Latch Plate	A B
12-04	LPiNZ0067AFFJ	Rod,Lock Connecting	A D
12-06	LRTNP0059AF00	Retaining Ring	A A
12-07	LX-WZ5018AGZZ	Washer,ϕ2.1×ϕ4×0.25mm	A A
12-09	LX-WZ9064AFZZ	Washer,ϕ1.5×ϕ3.8×0.5mm	A A
12-10	MCAMP0059AF00	Cam,End Gear	A C
12-11	MCAMP0067AF00	Cam Gear Assembly	A C
12-12	MLEVP0515AF00	Lever,Latch Release	A B
12-13	MLEVP0570AF00	Lever,Cam Lock	A C
12-14	MLEVP0571AF00	Lever,Sensor	A C
12-15	MLEVP0572AF00	Lever,Brake	A C
12-16	MLEVP0573AFZZ	Lever,Detection Killer	A C
12-17	MLEVP0574AFZZ	Lever,Brack Release	A C
12-18	MSPRC0449AFFJ	Spring,Latch Lock	A A
12-19	MSPRC0523AFFJ	Spring,Brake	A A
12-20	MSPRC0524AFFJ	Spring,Brake Release Lever	A A
12-21	MSPRD0628AFFJ	Spring,Pause Killer	A A
12-22	MSPRD0629AFFJ	Spring,Cam Lock Arm	A A
12-23	MSPRD0630AFFJ	Spring,Detection Killer	A A
12-24	MSPRT1124AFFJ	Spring,Lock Arm Return	A A
12-25	MSPRT0069AFFJ	Spring,Latch Release Lever Return	A B
12-26	NDAiR0183AFZZ	Turntable,Take-Up	A H
12-27	NDAiR0184AFZZ	Turntable,Supply	A H
12-28	NGERH0139AF00	Gear,Center	A C
12-31	NGERH0172AF00	Gear,Delivery	A C

REF.NO.	PART NO.	DESCRIPTION	CODE
12-34	XWHJZ47-02075	Washer, ϕ4.7×ϕ7.5×0.2mm	A A
13	LDAiH0065AFZZ	Head Base	A C
15	LRTNP0058AFZZ	Retainer	A A
16	LSLVM0189AFFW	Sleeve,Reverse Selector Lever	A B
17	MSPRC0538AFFJ	Spring,Play Lever Ruturn	A B
24	MLEVF1711AFZZ	Tape Guide Lever Assembly	A C
25	MLEVF1712AFZZ	Lever,Reverse Selector	A F
27	MLEVF1713AFZZ	Lever,Pause	A A
28	MLEVF1714AFZZ	Lever,APSS Switch	A A
29	MLEVF1715AFZZ	Lever,Play Release	A B
30	MLEVF1716AFZZ	Lever,Record Sensor	A C
31	MLEVF1717AFZZ	Lever,PAD Interchange	A C
32	MLEVF1718AFZZ	PAD Lever Assembly	A D
33	MLEVF1719AFZZ	Lever,Fast-Forward/ Rewind	A B
34	MLEVF1720AFZZ	Lever,Pause	A C
36	MLEVF1721AFZZ	Lever,Stop/Eject	A A
37	MLEVF1722AFZZ	Lever,Fast-Forward	A B
38	MLEVF1723AFZZ	Lever,Rewind	A B
39	MLEVF1724AFZZ	Lever,Play	A B
40	MLEVF1725AFZZ	Lever,Record	A B
41	MLEVF1726AFZZ	Lever,Direction	A B
42	MLEVF1727AFZZ	Lever,Reverse	A D
43	MLEVF1728AFZZ	Lever,Holder Release	A A
44	MLEVF1729AFZZ	Lever,Switch Keep	A C
45	MLEVF1730AFZZ	Lever,Switch	A D
46	MLEVF1731AFZZ	Lever,Main Lock	A E
47	MLEVF1732AFZZ	Plate,APSS Lock	A C
48	MLEVP0502AFZZ	Lever,Pause Lock	A B
49	MLEVP0503AFZZ	Tape Guide	A B
50	MLEVP0561AFZZ	Lever,PAD Lock	A B
51	MLEVP0562AF00	Lever,PAD Prevention	A B
52	MLEVP0563AFZZ	Lever,Release Interlock	A B
53	MLEVP0564AFZZ	Lever,Record Release	A B
54	MLEVP0565AFZZ	Lever,Erase Prevention	A A
55	MLEVP0566AFZZ	Lever,APSS	A B
56	MLEVP0567AFZZ	Lever,Cycle Stop	A B
57	MLEVP0568AFZZ	Lever,Mode Selector	A C
58	MLEVP0569AFZZ	Lever,Cassette Holder Lock	A C
59	MSPRC0517AFFJ	Spring,Azimuth	A A
60	MSPRC0518AFFJ	Spring,Earth	A A
61	MSPRC0519AFFJ	Spring,Lever Return	A A
62	MSPRC0520AFFJ	Spring,Play Idler Pressure	A A
64	MSPRC0522AFFJ	Spring,Pause Lock Lever	A A
65	MSPRD0618AFFJ	Spring,Pinch Roller, Forward	A A
66	MSPRD0619AFFJ	Spring,Pinch Roller, Reverse	A A
67	MSPRD0620AFFJ	Spring,Tape Guide	A A
68	MSPRD0621AFFJ	Spring,Play Release	A A
69	MSPRD0622AFFJ	Spring,Over Strock	A A
70	MSPRD0623AFFJ	Spring,PAD Drive	A A
71	MSPRD0624AFFJ	Spring,PAD Lock Lever	A A
72	MSPRD0625AFFJ	Spring,Record Release Lever	A A
73	MSPRD0626AFFJ	Spring,Mode Selector Lever	A B
74	MSPRD0627AFFJ	Spring,Cycle stop	A A
75	MSPRP0387AFFJ	Spring,Sub-chassis	A B
76	MSPRP0388AFFJ	Spring,Cssette Pressure	A B
77	MSPRT1120AFFJ	Spring,PAD Return	A A
78	MSPRT1121AFFJ	Spring,Main Lock Plate	A A
79	MSPRT1122AFFJ	Spring,APSS Lock Plate, Cassette Holder Lock Lever	A A
80	MSPRT1123AFFJ	Spring,PAD Prevention	A A
81	NBALS0006AGFJ	Steel Ball	A A
82	NBLTK0319AFZZ	Belt,Take-Up/Supply Turntable	A C
83	NBLTK0320AFZZ	Belt,Flywheel	A B
84	NFLYC0128AFZZ	Flywheel Assembly	A G
85	NGERH0168AFZZ	Gear,Flywheel	A B
86	NGERH0169AFZZ	Cam,PAD	A H
87	NiDR-0087AFZZ	Play Idler Assembly	A F
88	NPLYR0104AFZZ	Pulley,Center	A D
89	NRŌLM0073AFFW	Roller,Sub-chassis	—
90	NRŌLY0070AFZZ	Pinch Roller Forward Assembly	A E
91	NRŌLY0071AFZZ	Pinch Roller Reverse Assembly	A E
92	NSFTZ0127AFZZ	Pin,Reverse Lever	A C
93	PSPAD0054AFFW	Spacer,Head	A A
94	RHEDA0120AFZZ	Head,Erase	A N
95	RHEDH0131AFZZ	Head,Rcord/Playback	A Q
96	MSPRC0532AFFJ	Spring,Tape Guide Azimuth	A A
98	MSPRD0646AFFJ	Spring,Switch Keep Lever	A A
501	XBPSD20P08000	Screw, ϕ2×8mm	A A
502	XBBSD20P07000	Screw, ϕ2×7mm	A A
505	XBPSD20P12000	Screw, ϕ2×12mm	A A
506	XBPSD20W10000	Screw, ϕ2×10mm	A A
507	XBPSD26P12000	Screw, ϕ2.6×12mm	A A
508	XBSSD20P04000	Screw, ϕ2×4mm	A A
510	XJBSD20P12000	Screw, ϕ2×12mm	A A
511	XJBSD26P34000	Screw, ϕ2.6×34mm	A A
512	XREUJ20-04000	Ring,"E"Type, ϕ2×0.4mm	A A
513	XREUJ25-04000	Ring,"E"Type, ϕ2.5×0.4mm	A A
514	XWHSD21-05040	Washer, ϕ2.1×ϕ4×0.5mm	A A
515	XWHJZ23-05045	Washer, ϕ2.3×ϕ4.5×0.5mm	A A
517	LX-BZ0451AFFD	Screw	A A
518	LX-BZ0515AFFD	Screw	A A
519	LX-HZ0056AFFD	Screw, ϕ3×10mm	A A
520	LX-HZ0077AFZZ	Screw, ϕ2.6×10mm	A A
521	LX-NZ0171AFZZ	Nut,Azimuth	A A
522	LX-WZ5049AGZZ	Washer, ϕ1.7×ϕ3.2×0.13mm	A A
523	LX-WZ9066AFZZ	Washer, ϕ1.2×ϕ3.2×0.5mm	A A
524	XJBSD20P07000	Screw, ϕ2×7mm	A A
525	XBPSD20P05JS0	Screw, ϕ2×5mm	A A
526	XWHJZ21-05040	Washer, ϕ2.1×ϕ4×0.5mm	A A

CABINET PARTS

201	CCAB-1340AF01	Cabinet Assembly,Front, H(S)	A Z
201	CCAB-1340AF03	Cabinet Assembly,Front, H(D),E(D)	A Z
201-1	————	Cabinet,Front,H(S)	—
201-1	————	Cabinet,Front,H(D),E(D)	—
201-2	HDALP0586AFSA	Plate,Dial,H(S)	A R
201-2	HDALP0586AFSB	Plate,Dial,H(D),E(D)	A R
201-3	HDECP0252AFSA	Decoration Plate,Graphic Equalizer,H(S)	A H
201-3	HDECP0252AFSB	Decoration Plate,Graphic Equalizer,H(D),E(D)	A H
201-4	PCUSU0290AFZZ	Cushion,Built-in Microphone	A A
202	CSPRT0796AF23	Dial Stringing Assembly	A D
203	GCAB-1341AFSA	Cabinet Assembly,Front, Speaker,H(S)	A X
203	GCAB-1341AFSB	Cabinet Assembly,Front, Speaker,H(D)	A X
203	GCAB-1350AFSA	Cabinet Assembly,Front, Speaker,E(D)	B B
204	GCABB1958AFSA	Cabinet,Rear,H(S)	A V
204	GCABB1958AFSB	Cabinet,Rear,H(D),E(D)	A V
205	GCABB1951AFSA	Cabinet,Rear,Speaker,Left, H(S)	A S

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REF.NO.	PART NO.	DESCRIPTION	CODE
205	GCABB1951AFSB	Cabinet,Rear,Speaker,Left, H(D),E(D)	A S
206	GCABB1952AFSA	Cabinet,Rear,Speaker, Right,H(S)	A S
206	GCABB1952AFSB	Cabinet,Rear,Speaker, Right,H(D),E(D)	A S
207	GCŌVH1179AFSi	Cover,AC Power Supply Socket,H(D),E(D)	A B
207	GCŌVH1179AFSK	Cover,AC Power Supply Socket,H(S)	A B
208	GFTAB1132AFSC	Battery Compartment Lid, H(S)	A F
208	GFTAB1132AFSD	Battery Compartment Lid, H(D),E(D)	A F
209	GFTAC1430AFSA	Holder Assembly,Cassette, H(S)	A N
209	GFTAC1430AFSB	Holder Assembly,Cassette, H(D),E(D)	A N
209-1	GFTAC1424AFSA	Cassette Holder	A H
209-2	HDECP0253AFSA	Decoration Plate,Cassette Holder,H(S)	A H
209-2	HDECP0253AFSB	Decoration Plate,Cassette Holder,H(D),E(D)	A H
210	HiNDP0674AFSA	Label,Caution,H(S)	A B
210	HiNDP0674AFSB	Label,Caution,H(D),E(D)	A B
211	HiNDP1140AFSA	Label,Specifications,H(S)	A B
211	HiNDP1141AFSA	Label,Specifications,H(D)	A C
211	HiNDP1176AFSA	Label,Specifications,E(D)	A C
212	HSSND0349AFSA	Dial Pointer	A C
213	JHNDG1094AFSA	Handle,H(D),E(D)	A P
213	JHNDG1094AFSE	Handle,H(S)	A P
215	JKNBK0340AFSA	Knob,Band Selector	A B
216	JKNBM0575AFSA	Button,Selector Switches	A D
217	JKNBZ0368AFSA	Knob,Graphic Equalizer, Balance,Volume Control	A E
218	JKNBZ0375AFSA	Knob,Tuning Control	A D
219	KCŌUB0169AFZZ	Tape Counter	A G
221	LHLDF1322AFSA	Frame	A H
222	LHLDF1323AFSA	Holder,Graphic Equalizer	A F
223	LHLDL1059AFSA	Holder,Handle	A B
224	LHLDW1075AFZZ	Nylon Band,60mm	A A
225	LHLDW3073AFZZ	Holder,Wire	A A
226	MLEVF1709AFFW	Lever,Record Interlocking	A E
227	MLiFP0034AFZZ	Damper	A C
228	MSPRC0511AFFJ	Spring,Battery (+)	A A
229	MSPRC0512AFFJ	Spring,Battery (-)	A B
230	MSPRC0513AFFJ	Spring,Battery (+,-)	A C
231	MSPRD0617AFFJ	Spring,Cassette Holder	—
232	NBLTK0315AFZZ	Belt,Tape Counter	A B
233	NDRM-0089AFZZ	Drum	A D
234	NPLYB0072AFZZ	Pulley,Dial Cord	A C
235	NPLYB0079AFZZ	Pulley,Dial Cord	A C
237	PCUSU0261AFZZ	Cushion,Battery,Big	A B
238	PCUSU0309AFZZ	Cushion,Battery,Small	A A
239	PFLT-0405AFZZ	Felt,Leg	A A
240	PFLT-0596AF00	Felt,Speaker	A A
241	PRDAR0371AFFW	Heat Sink	A E
242	QANTR0112AFZZ	Rod Antenna	A N
251	QFSHD2051AFZZ	Holder,Fuse	A A
252	QTANZ0189AFFW	Terminal,Rod Antenna	A B
253	RMiCC0086AFZZ	Microphone	A F
254	TLABT0053AFZZ	Label,License	A A
255	TLABT0055AFZZ	Label,Dolby,H(D),E(D)	A A
255	TLABT0057AFZZ	Label,Dolby,H(S)	A A
256	PCŌVP1230AFZZ	Cover,Power Supply P.W.B	A E
601	LX-BZ0286AFFF	Screw,ϕ2×10mm	A A
602	LX-BZ0308AFFD	Screw,ϕ3×6.5mm	A A
603	LX-CZ0017AFZZ	Screw,ϕ3×25mm	A A
605	XBPSD26P06J00	Screw,ϕ2.6×6mm	A A
606	XCBSD30P10000	Screw,ϕ3×10mm	A A
607	XCBSD30P12000	Screw,ϕ3×12mm	A A
608	XCBSD30P14000	Screw,ϕ3×14mm	A A
609	XCBSD30P08000	Screw,ϕ3×8mm	A A
610	XCTSE40P12000	Screw,ϕ4×12mm	A A
612	XHBSD30P08000	Screw,ϕ3×8mm	A A
613	XNESD20-16000	Nut,ϕ2×1.6mm	A A
614	XNESD30-20000	Nut,ϕ3×2mm	A A
615	XCBSD40P08000	Screw,ϕ4×8mm,E(D) Only	A A

ACCESSORIES/PACKING PARTS

⚠	QACCB0057AF09	AC Power Supply Cord, E(D)	A M
⚠	QACCK0050AFZZ	AC Power Supply Cord, H(D/S)	A L
	RTPEK0101AFZZ	Cassette Tape,H(D/S) Only	A K
	SSAKA0104AFZZ	Polyethylene Bag, Operation Manual,E(D)	A A
	SPAKA1274AFZZ	Packing Add.,Left	A E
	SPAKA1275AFZZ	Packing Add.,Right	A E
	SPAKA1276AFZZ	Packing Add.,Speaker	A E
	SPAKC3107AFZZ	Packing Case,H(S)	A L
	SPAKC3108AFZZ	Packing Case,H(D)	A L
	SPAKC3175AFZZ	Packing Case,E(D)	A L
	SPAKP0551AFZZ	Polyethylene Bag,Unit, E(D)	A C
	SSAKA0035AFZZ	Polyethylene Bag, Operation Manual,H(D/S)	A A
	SSAKA0058AGZZ	Polyethylene Bag,Unit, H(D/S)	A B
	SSAKH0005SEZZ	Polyethylene Bag,Speaker	A A
	TCAUA0178AFZZ	Label,Caution,Arabic,H(D/S) Only	A A
	TCAUH0056AGZZ	Caution,AC Power Supply Cord,E(D) Only	A A
	TCAUZ0039AFZZ	Caution Label,Polyethylene Bag,E(D) Only	A A
	TGANE1117AFZZ	Warranty Card,E(D)	A B
	TGANG1054AFZZ	Warranty Card,H(D/S)	A A
	TiNSE1029AFZZ	Operation Manual,E(D)	A H
	TiNSZ0720AFZZ	Operation Manual,H(D/S) for SEEG,UK and SES	A M
	TiNSZ0721AFZZ	Operation Manual,H(D/S) for EX	—
	TLABJ0006AFZZ	Label,MADE IN JAPAN, E(D) Only	A A
	TLABZ0612AFZZ	Label,Speacial Fuature	A C
	TTAGH0355AFZZ	Tag,H(D/S) Only	A C
	UBATU0009AGZZ	Battery,H(D/S) Only	A C

P.W.B. ASSEMBLY (Not Replacement Item)

DUNTL0333AF04 (Combined Assembly)	Main,H(D/S)	—
DUNTL0333AF08 (Combined Assembly)	Main,E(D)	—
DUNTZ0577AF03	Graphic Equalizer	—

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